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SUMMARY REPORT FOR AFSCS TRAINED AT SHEPPARD AFB.(U)
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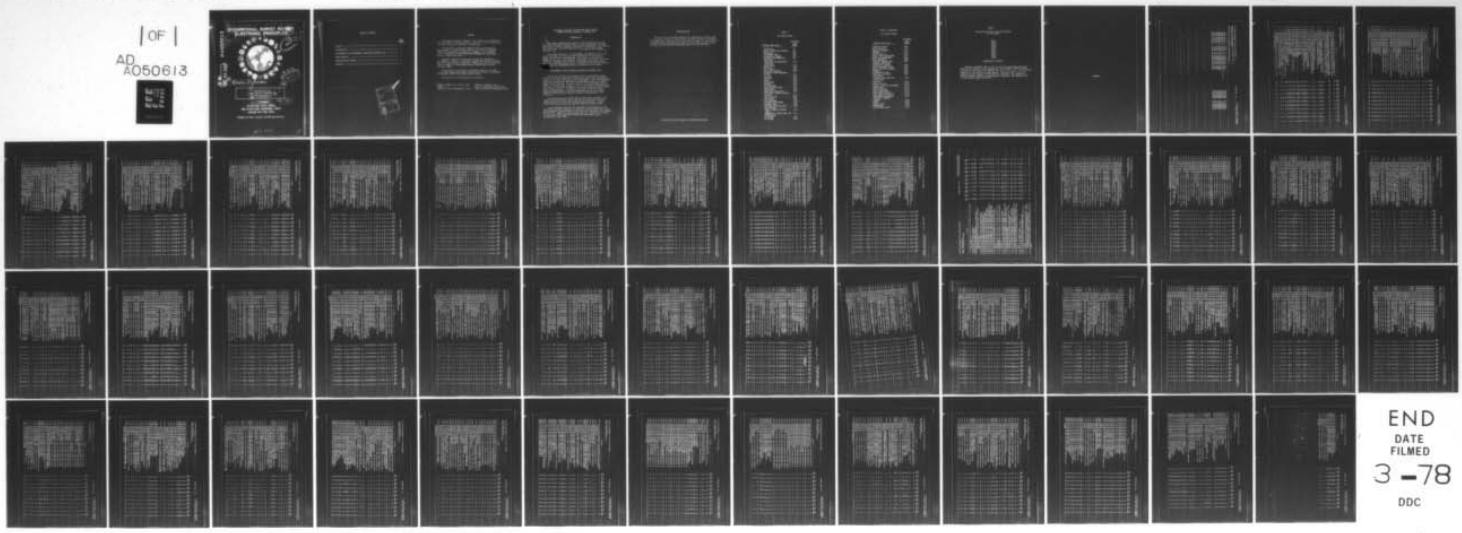

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OCCUPATIONAL SURVEY REPORT.
ELECTRONIC PRINCIPLES.

Jan 76 - Sep 77

Charles D. Gorman

SUMMARY REPORT FOR
AFSCs TRAINED AT SHEPPARD AFB.

AFPT-90-XXX-222

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OCCUPATIONAL SURVEY BRANCH
USAF OCCUPATIONAL MEASUREMENT CENTER
LACKLAND AFB TEXAS 78236

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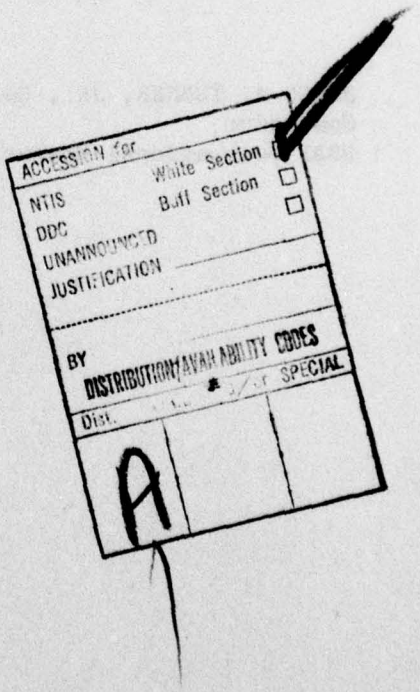

PREFACE

This report presents a summary of the results of a detailed Air Force Electronic Principles Survey of airmen in Air Force Specialties for which training is provided at Sheppard AFB.

The Electronic Principles Inventory (EPI) was developed by Major Thomas J. O'Connor and Mr. Hendrick W. Ruck and the survey report was prepared by Capt Charles D. Gorman. All are members of the Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AFB, Texas.

Computer programs for analyzing the data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Distribution of this report is made upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

JAMES A. TURNER, JR., Colonel, USAF
Commander
USAF Occupational Measurement Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Survey Branch
USAF Occupational Measurement Center

ELECTRONIC PRINCIPLES OCCUPATIONAL SURVEY REPORT
SUMMARY FOR AFSCs TRAINED AT SHEPPARD AFB

INTRODUCTION

This report summarizes the results of the administration of the Electronic Principles Inventory (EPI) to airmen assigned to Air Force Specialties for which training is provided at Sheppard AFB. The data for this report were collected during the period January 1976 through September 1977.

This report describes: (1) development and administration of the survey instrument; and (2) electronic principles used by airmen in specialties trained at Sheppard AFB. This report is intended as a summary of EPI data. More complete information on any given AFSC can be obtained by examining the Electronic Principles Occupational Survey Report for that AFSC. Such reports are available upon request from the Occupational Measurement Center, Lackland AFB, Texas 78236.

DEVELOPMENT OF THE ELECTRONIC PRINCIPLES INVENTORY (EPI)

The EPI was developed by personnel from the Occupational Survey Branch who were well qualified in theoretical physics and electronics, as well as in task analysis and survey development. Over 300 maintenance personnel from SAC, TAC, ADC, MAC, and AFCS participated in the development of the inventory. Representing the five ATC training centers, electronics experts who averaged 12 years of maintenance experience and four years of electronic principles instruction experience spent several weeks refining the EPI. In addition, personnel at the Electrical Engineering Department of the USAF Academy and the Air Force Human Resources Laboratory were consulted during the development of the inventory.

The final version of the EPI used in this survey contained 1,257 items in 62 subject matter areas covering all electronic principles training given at the five ATC technical training centers. Table 1 lists the 62 subject areas and the item numbers contained therein.

A more detailed history of the development and validation of the Electronic Principles Inventory is contained in OM Technical Note 77-02, The Development and Application of the Electronic Principles Job Inventory, October 1977. Copies of this Technical Note are available upon request to the Branch Chief, OMY, USAF Occupational Measurement Center, Lackland AFB, Texas 78236.

ADMINISTRATION

The Electronic Principles Inventory was administered either by mail or in person to airmen in 10 specialties for which training is provided at Sheppard AFB. Those specialties are listed in Table 2. More detailed information concerning the survey sample for any given specialty can be obtained from the previously mentioned report for that specialty.

TABLE 1

EPI SUBJECT AREAS

SUBJECT AREA TITLE	BEGINNING ITEM NUMBER
MATHEMATICS	A1
DIRECT CURRENT AND VOLTAGE	A15
RESISTANCE	A24
MULTIMETER USES	B52
ALTERNATING CURRENT	B61
INDUCTORS AND INDUCTIVE REACTANCE	B87
CAPACITORS AND CAPACITIVE REACTANCE	C92
TRANSFORMERS	C128
MAGNETISM	C171
RCL CIRCUITS	D185
SERIES AND PARALLEL RESONANCE (TIME CONSTANTS)	D229
FILTERS	D239
COUPLING	E261
SOLDERING	E273
RELAYS	E295
MICROPHONES	F314
SPEAKERS	F327
OSCILLOSCOPES	F342
SEMICONDUCTOR DIODES	G354
TRANSISTORS	G404
TRANSISTOR AMPLIFIERS	G428
SOLID-STATE SPECIAL PURPOSE DEVICES	H477
POWER SUPPLIES	H483
OSCILLATORS	H512
MULTIVIBRATORS	I539
LIMITERS AND CLAMPERS	I555
ELECTRON TUBES	I565
ELECTRON TUBE AMPLIFIERS AND CIRCUITS	J609
SPECIAL PURPOSE ELECTRON TUBES	J616
HETERODYNING, MODULATION, AND DEMODULATION	J632
AM SYSTEMS	K638
FM SYSTEMS	K666

TABLE 1 (CONTINUED)

EPI SUBJECT AREAS

SUBJECT AREA TITLE	BEGINNING ITEM NUMBER
NUMBERING SYSTEMS	K685
LOGIC FUNCTIONS	L695
BOOOLEAN EQUATIONS	L708
COUNTERS	L733
TIMING CIRCUITS	M757
USE OF SIGNAL GENERATORS	M769
MOTORS AND GENERATORS	M779
METER MOVEMENTS	N808
SATURABLE REACTORS AND MAGNETIC AMPLIFIERS	N818
WAVESHAPING CIRCUITS	N834
SINGLE SIDEBAND SYSTEMS	O845
PULSE MODULATION SYSTEMS	O875
ANTENNAS	O914
TRANSMISSION LINES	P953
WAVEGUIDES AND CAVITY RESONATORS	P984
MICROWAVE AMPLIFIERS AND OSCILLATORS	P1034
REGISTERS	Q1110
STORAGE DEVICES	Q1117
DIGITAL TO ANALOG CONVERTERS	Q1126
PHANTASTRONS	Q1140
SCHMITT TRIGGERS	R1141
CABLE FABRICATION	R1144
INPUT/OUTPUT DEVICES	S1146
PHOTO SENSITIVE DEVICES	S1149
SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)	S1150
INFRARED	T1159
LASERS	T1186
DISPLAY TUBES	T1220
PROGRAMMING	U1234
DB AND POWER RATIOS	U1255

TABLE 2

SPECIALTIES FOR WHICH DATA ARE PROVIDED
IN THIS REPORT

306X1
306X2
316X1F
316X1P
362X1
362X2
362X3
362X4
403XO
442XO

PRESENTATON OF RESULTS

Personnel responded "yes" or "no" to the 1,257 electronic principles questions as related to their present job. Group Summary (GPSUM) computer printouts are provided in the Appendix portion of this report. They summarize responses to the inventory by AFSC groups. The first page of the Group Summary lists the groups for which data are presented. The remainder of the Group Summary displays the percentage of each group who answered "yes" to each question asked in the EPI.

APPENDIX

TABULATION OF PERCENT MEMBERS RESPONDING 'YES' TO
QUESTIONS BY DAFSC GROUPS

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY =	SPC226	ALL AIRMEN DAFSC 30651	CONTAINING	116 MEMBERS.
GROUP IDENTITY =	SPC251	ALL AIRMEN DAFSC 30652	CONTAINING	241 MEMBERS.
GROUP IDENTITY =	SPC700	ALL AIRMEN DAFSC 31651/1F/1L/1P/1Q	CONTAINING	49 MEMBERS.
GROUP IDENTITY =	SPC701	ALL AIRMEN DAFSC 31651F	CONTAINING	16 MEMBERS.
GROUP IDENTITY =	SPC702	ALL AIRMEN DAFSC 31651P	CONTAINING	33 MEMBERS.
GROUP IDENTITY =	SPC703	ALL AIRMEN DAFSC 36251	CONTAINING	106 MEMBERS.
GROUP IDENTITY =	SPC704	ALL AIRMEN DAFSC 36252	CONTAINING	68 MEMBERS.
GROUP IDENTITY =	SPC705	ALL AIRMEN DAFSC 36253	CONTAINING	61 MEMBERS.
GROUP IDENTITY =	SPC706	ALL AIRMEN DAFSC 36254	CONTAINING	108 MEMBERS.
GROUP IDENTITY =	SPC707	ALL AIRMEN DAFSC 40350	CONTAINING	104 MEMBERS.
GROUP IDENTITY =	SPC708	ALL AIRMEN DAFSC 44250	CONTAINING	33 MEMBERS.

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
A	1	A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS OF 10.	82	66	73	69	76	42	84	62	37	93	27
A	2	A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY ON THE JOB.	38	20	49	56	45	17	37	15	20	58	27
A	3	A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.	22	12	55	81	42	14	47	25	9	70	36
A	4	A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	7	6	12	19	9	5	15	5	3	39	3
A	5	A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	20	13	29	44	21	10	31	16	6	54	15
A	6	A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	2	4	6	13	3	3	0	5	0	22	0
A	7	A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	3	3	6	13	3	3	1	3	0	23	0
A	8	A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.	3	3	10	6	12	5	6	3	4	23	3
A	9	A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	3	3	2	0	3	3	4	2	0	13	0
A	10	A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	3	3	10	13	9	5	6	2	1	33	0
A	11	A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	4	4	18	31	12	8	1	7	2	29	0
A	12	A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	1	4	12	19	9	5	0	3	2	23	3
A	13	A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	2	3	6	0	9	5	3	3	1	19	0
A	14	A1-14 DO YOU SOLVE OR USE PROPORTIONS.	9	6	14	19	12	6	12	7	0	46	0
A	15	A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).	95	90	98	100	97	88	94	93	81	99	91
A	16	A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).	28	34	22	38	15	28	44	31	33	69	0
A	17	A2-03 DO YOU USE THE TERM OHM.	94	87	98	100	97	91	94	93	76	99	91
A	18	A2-04 DO YOU USE THE TERM ION.	6	13	10	19	6	10	15	10	10	60	0
A	19	A2-05 DO YOU USE THE TERM DYNE.	5	6	10	19	6	6	7	2	6	38	0
A	20	A2-06 DO YOU USE THE TERM AMPERE.	91	82	98	100	97	88	91	93	71	97	39
A	21	A2-07 DO YOU USE THE TERM NEUTRON.	13	17	12	25	6	15	31	13	10	49	0
A	22	A2-08 DO YOU USE THE TERM COULOMB.	13	7	12	25	6	10	19	8	8	50	0
A	23	A2-09 DO YOU USE THE TERM PROTON.	12	18	10	19	6	15	31	11	11	49	0
A	24	A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.	86	71	76	75	76	68	87	82	45	85	6
A	25	A3-02 DO YOU INSPECT RESISTORS.	90	75	63	38	76	68	90	85	31	97	0
A	26	A3-03 DO YOU CLEAN RESISTORS.	77	61	53	38	61	29	63	57	7	86	0
A	27	A3-04 DO YOU ADJUST RESISTORS.	87	70	76	88	70	35	82	75	15	97	0
A	28	A3-05 DO YOU CHECK OHMIC VALUE OF RESISTORS.	91	77	82	81	82	67	91	87	43	99	3
A	29	A3-06 DO YOU REMOVE OR REPLACE RESISTORS.	90	79	63	50	70	73	90	84	35	99	0
A	30	A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM.	30	12	22	25	21	14	31	15	6	54	0
A	31	A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.	84	68	76	75	76	62	87	80	46	99	0
A	32	A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR POTENTIOMETER.	85	68	67	63	70	58	82	84	35	99	0
A	33	A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.	86	68	55	50	58	60	87	84	36	100	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
A	34	A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.	82	54	49	50	48	42	78	70	30	95	3
A	35	A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.	24	17	8	0	12	13	29	26	16	34	0
A	36	A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO ACHIEVE A SPECIFIC VOLTAGE.	16	26	37	38	36	36	43	46	39	85	0
A	37	A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	92	80	60	88	76	76	91	93	56	100	9
A	38	A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.	36	39	33	50	24	44	47	46	33	89	3
A	39	A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.	33	40	29	44	21	42	47	39	32	84	3
A	40	A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.	38	39	33	69	15	38	50	44	31	91	0
A	41	A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.	22	27	31	56	18	25	35	36	23	73	0
A	42	A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.	37	39	27	38	21	38	44	48	26	85	3
A	43	A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.	34	39	24	31	21	38	44	39	25	80	3
A	44	A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	38	39	29	56	15	31	47	43	24	88	0
A	45	A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.	33	32	22	38	15	30	44	41	23	80	0
A	46	A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.	22	25	27	44	18	26	32	36	19	70	0
A	47	A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.	37	37	27	38	21	36	44	43	23	82	3
A	48	A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.	34	36	22	31	18	35	44	36	22	79	3
A	49	A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.	39	34	29	56	15	27	43	38	22	86	0
A	50	A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.	34	31	22	38	15	27	43	36	20	78	0
A	51	A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.	23	24	22	44	12	25	32	34	14	69	0
B	52	B1-01 DO YOU MEASURE RESISTANCE.	92	85	94	100	91	89	96	92	66	97	64
B	53	B1-02 DO YOU REPAIR OHMMETERS.	5	5	8	13	6	8	7	5	6	17	0
B	54	B1-03 DO YOU MEASURE VOLTAGE.	93	85	96	100	94	91	96	93	74	98	76
B	55	B1-04 DO YOU REPAIR VOLTMETERS.	5	3	8	13	6	8	9	5	4	15	0
B	56	B1-05 DO YOU REPAIR AMMETERS.	6	4	6	13	3	8	7	3	4	13	0
B	57	B1-06 DO YOU MEASURE CURRENT.	82	83	82	75	85	79	91	70	60	95	27
B	58	B1-07 DO YOU USE MULTIMETERS.	91	86	96	100	94	92	94	93	73	99	76
B	59	B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.	3	2	2	0	3	6	7	3	2	18	0
B	60	B1-09 DO YOU READ SCHEMATICS.	91	86	94	94	94	89	96	93	82	98	82

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
B	61	B2-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (RMS).	58	39	47	50	45	25	63	74	20	91	3
B	62	B2-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.	83	49	57	63	55	23	76	80	15	90	3
B	63	B2-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).	66	54	59	50	64	36	62	70	35	85	15
B	64	B2-04 DO YOU USE OR REFER TO THE TERM WAVE LENGTH.	51	35	51	56	48	20	54	62	6	81	0
B	65	B2-05 DO YOU USE OR REFER TO THE TERM FREQUENCY.	80	41	92	100	88	42	87	84	26	94	0
B	66	B2-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.	19	11	24	19	27	10	21	15	5	49	0
B	67	B3-01 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB.	54	23	20	25	18	17	68	48	16	79	0
B	68	B3-02 DO YOU INSPECT INDUCTORS.	59	20	14	6	18	13	63	46	11	81	0
B	69	B3-03 DO YOU CLEAN INDUCTORS.	53	16	12	6	15	9	47	26	4	68	0
B	70	B3-04 DO YOU ADJUST INDUCTORS.	33	8	6	13	3	8	38	25	1	77	0
B	71	B3-05 DO YOU REMOVE OR REPLACE INDUCTORS.	58	20	10	19	6	16	59	46	11	81	0
B	72	B3-06 DO YOU USE OR REFER TO INDUCTANCE.	45	15	16	19	15	18	47	31	12	81	0
B	73	B3-07 DO YOU USE OR REFER TO HENRIES.	29	12	14	19	12	11	40	20	8	71	0
B	74	B3-08 DO YOU USE OR REFER TO INDUCTIVE REACTANCE.	25	12	14	19	12	14	37	26	7	75	0
B	75	B3-09 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.	3	4	6	13	3	3	10	7	2	22	0
B	76	B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.	6	4	10	19	6	2	10	8	2	28	0
B	77	B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS	5	5	8	19	3	4	13	11	1	33	0
B	78	B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL.	4	6	4	13	0	6	15	13	5	29	0
B	79	B2-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE.	3	5	4	13	0	7	10	10	2	22	0
B	80	B2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH.	3	4	4	13	0	3	12	10	2	22	0
B	81	B2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMEABILITY OF THE CORE MATERIAL.	4	4	6	13	3	7	18	7	4	28	0
B	82	B2-16 DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.	3	5	8	19	3	4	19	15	2	28	0
B	83	B3-17 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES.	4	7	8	19	3	5	25	13	2	31	0
B	84	B3-18 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.	4	7	8	19	3	5	25	15	2	31	0
B	85	B3-19 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.	4	7	10	19	6	5	26	13	2	32	0
B	86	B3-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.	10	8	10	19	6	7	38	15	4	55	0
B	87	B3-21 DO YOU CALCULATE INDUCTIVE REACTANCE.	6	6	14	19	12	4	28	13	2	41	0
B	88	B3-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.	9	6	16	19	15	3	24	13	4	47	0
B	89	B3-23 DO YOU WORK WITH POWER INDUCTORS.	35	14	8	13	6	5	37	15	6	61	0
B	90	B3-24 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.	24	3	6	13	3	8	49	33	5	68	0
B	91	B3-25 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.	15	7	10	13	9	2	7	8	1	62	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
C 92	C1-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.	82	68	51	44	55	66	82	85	51	82	0
C 93	C1-02 DO YOU INSPECT CAPACITORS.	91	72	37	25	42	58	81	80	33	97	0
C 94	C1-03 DO YOU CLEAN CAPACITORS.	81	56	24	13	30	34	62	56	13	78	0
C 95	C1-04 DO YOU ADJUST CAPACITORS.	34	21	27	31	24	12	32	28	6	88	0
C 96	C1-05 DO YOU TEST CAPACITORS.	81	68	43	31	48	58	72	74	28	96	0
C 97	C1-06 DO YOU DISCHARGE CAPACITORS.	84	68	39	31	42	38	72	69	25	96	0
C 98	C1-07 DO YOU REMOVE OR REPLACE CAPACITORS.	91	75	41	25	48	62	82	77	31	99	0
C 99	C1-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.	6	10	10	19	6	8	16	13	3	36	0
C 100	C1-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.	2	4	6	13	3	2	6	2	2	13	0
C 101	C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS.	81	56	33	31	33	37	75	56	20	93	0
C 102	C1-11 DO YOU USE OR REFER TO CAPACITANCE.	78	59	43	31	48	56	74	70	30	92	0
C 103	C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT	6	7	8	19	3	7	13	5	2	28	0
C 104	C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	59	40	27	31	24	24	51	48	17	84	0
C 105	C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE	22	19	20	31	15	15	37	26	10	70	0
C 106	C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES	23	21	18	6	24	18	29	16	8	55	0
C 107	C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS	91	71	47	31	55	64	87	85	42	96	0
C 108	C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS	82	67	41	31	45	38	68	64	43	98	0
C 109	C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	79	58	37	31	39	39	68	64	38	95	0
C 110	C1-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS	8	15	10	0	15	14	10	18	14	13	0
C 111	C1-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS	4	4	10	25	3	5	21	8	3	38	0
C 112	C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT	1	5	8	19	3	4	7	5	3	21	0
C 113	C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS	1	6	8	19	3	5	7	7	2	22	0
C 114	C1-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	12	11	14	25	9	14	29	15	8	46	0
C 115	C1-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	12	12	14	25	9	14	31	15	11	48	0
C 116	C1-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	11	11	14	25	9	15	29	16	11	47	0
C 117	C1-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO	29	27	16	31	9	23	31	26	15	59	0
C 118	C1-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	14	15	16	31	9	9	37	15	11	58	0
C 119	C1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY	6	8	16	25	12	6	24	10	6	45	0
C 120	C1-29 DO YOU CALCULATE CAPACITIVE REACTANCE	4	7	16	25	12	6	25	10	6	38	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
C 121	C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	20	14	12	19	9	9	21	11	13	81	0
C 122	C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS	18	7	8	13	6	4	15	7	4	71	0
C 123	C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	86	58	29	31	27	38	82	69	25	94	0
C 124	C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS	74	52	27	25	27	40	76	43	23	92	0
C 125	C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS	73	46	27	19	30	35	63	43	17	88	0
C 126	C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	78	55	35	25	39	41	72	57	25	91	0
C 127	C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	14	22	20	19	21	23	15	28	18	14	0
C 128	C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	72	55	43	69	30	19	72	70	20	78	0
C 129	C2-02 DO YOU INSPECT TRANSFORMERS	76	57	35	44	30	21	74	75	19	93	0
C 130	C2-03 DO YOU CLEAN TRANSFORMERS	70	48	24	25	24	14	57	49	11	73	0
C 131	C2-04 DO YOU ADJUST TRANSFORMERS	17	23	24	38	18	13	41	34	6	72	0
C 132	C2-05 DO YOU TROUBLESHOOT TRANSFORMERS	66	54	39	56	30	18	66	64	16	92	0
C 133	C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	68	56	39	56	30	16	68	75	19	93	0
C 134	C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	5	7	2	0	3	4	13	7	5	16	0
C 135	C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)	2	5	6	13	3	1	6	2	1	19	0
C 136	C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	3	5	10	19	6	1	7	2	0	18	0
C 137	C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	5	6	8	13	6	5	12	3	0	28	0
C 138	C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	9	8	12	19	9	5	28	20	2	45	0
C 139	C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	3	6	6	6	6	3	10	13	1	27	0
C 140	C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	3	5	4	6	3	3	7	7	0	15	0
C 141	C2-14 DO YOU WORK WITH AUTOTRANSFORMERS	13	9	12	19	9	3	26	16	0	91	0
C 142	C2-15 DO YOU WORK WITH POWER TRANSFORMERS	72	56	35	50	27	18	65	54	21	91	0
C 143	C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS	23	6	14	25	9	14	54	59	6	77	0
C 144	C2-17 DO YOU WOPK WITH RADIO FREQUENCY TRANSFORMERS	12	6	12	19	9	4	10	8	2	70	0
C 145	C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	13	13	6	13	3	7	18	21	6	10	0
C 146	C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	70	54	37	56	27	18	68	67	14	94	0
C 147	C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	66	51	35	56	24	17	65	64	11	86	0
C 148	C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	60	43	33	44	27	10	63	52	15	87	0
C 149	C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO	17	21	14	19	12	9	34	28	8	45	0
C 150	C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO	25	29	18	25	15	10	40	34	7	80	0
C 151	C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	76	51	41	56	33	18	74	64	17	92	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
C 152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	68	30	29	31	27	19	53	49	18	88	0
C 153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	66	39	35	50	27	15	62	48	11	91	0
C 154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	71	44	33	50	24	14	63	57	14	92	0
C 155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	29	15	20	31	15	10	34	36	14	71	0
C 156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	38	20	24	44	15	11	47	44	16	72	0
C 157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS	52	29	27	38	21	13	44	44	15	80	0
C 158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS	22	15	27	31	24	7	32	13	6	61	0
C 159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH	13	11	18	25	15	9	26	10	4	42	0
C 160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO	15	11	8	13	6	6	35	21	0	53	0
C 161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS	26	25	22	31	18	11	38	38	6	72	0
C 162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS	9	8	8	19	3	4	32	15	2	47	0
C 163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS	7	6	8	19	3	4	28	15	2	38	0
C 164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS	10	5	24	38	18	4	19	5	1	71	0
C 165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS	7	4	16	13	12	4	9	3	1	62	0
C 166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS	4	2	6	13	3	4	7	3	0	42	0
C 167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS	3	2	8	13	6	3	4	3	0	36	0
C 168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS	7	2	16	13	12	4	9	3	1	59	0
C 169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS	7	3	16	19	15	3	7	3	1	49	0
C 170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS	2	1	0	0	0	2	4	2	1	20	0
C 171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS	43	45	20	25	18	25	34	23	28	72	3
C 172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS	38	38	14	19	12	32	37	18	19	58	0
C 173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	11	9	10	19	6	19	21	5	6	35	0
C 174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	17	7	10	19	6	13	21	7	6	29	0
C 175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	12	12	12	25	6	14	24	7	6	31	0
C 176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM	17	15	16	25	12	54	44	15	7	43	0
C 177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	28	16	33	25	36	24	37	13	12	50	0
C 178 C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM	4	4	8	25	0	5	6	5	4	17	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
C 179	C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	3	5	8	25	0	4	4	5	4	16	0
C 180	C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION	16	13	18	25	15	25	29	13	16	48	0
C 181	C3-11 DO YOU USE OR REFER TO FLUX DENSITY	11	8	20	25	18	5	28	7	6	27	0
C 182	C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT	31	48	31	38	27	39	59	33	39	68	12
C 183	C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	11	17	18	38	9	15	21	15	19	38	3
C 184	C3-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	9	15	14	31	6	13	19	15	13	38	0
D 185	D1-01 DO YOU WORK WITH RC, LR, RCL CIRCUITS IN YOUR PRESENT JOB	40	11	16	19	15	4	49	25	6	63	0
D 186	D1-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	2	4	6	13	3	1	13	2	0	35	0
D 187	D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	2	2	4	13	0	1	10	3	0	25	0
D 188	D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	2	4	12	19	9	2	9	3	1	25	0
D 189	D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	2	3	8	19	3	2	9	3	1	27	0
D 190	D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	2	4	8	19	3	1	10	3	1	25	0
D 191	D1-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS	13	9	14	19	12	2	26	7	2	56	0
D 192	D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	8	6	10	19	6	1	21	2	0	42	0
D 193	D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	8	5	6	13	3	2	18	2	0	40	0
D 194	D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	8	5	10	13	9	1	16	7	0	38	0
D 195	D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	8	5	10	19	6	2	15	2	0	37	0
D 196	D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	8	6	6	19	0	2	10	3	1	38	0
D 197	D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	9	6	6	13	3	2	21	8	2	58	0
D 198	D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	8	3	8	13	6	2	16	10	0	56	0
D 199	D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	7	4	8	13	6	2	15	8	1	50	0
D 200	D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	11	4	10	13	9	2	22	10	2	63	0
D 201	D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	3	3	6	19	0	2	3	0	0	33	0
D 202	D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	7	3	4	13	0	1	10	7	0	47	0
D 203	D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	4	2	4	13	0	1	6	0	0	37	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
D 204	D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	20	7	10	13	9	1	25	8	1	66	0
D 205	D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	1	4	4	13	0	1	6	2	1	23	0
D 206	D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	2	4	8	13	6	2	6	3	1	28	0
D 207	D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	3	5	4	13	0	2	16	5	2	35	0
D 208	D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	2	3	6	19	0	1	6	2	1	23	0
D 209	D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	5	4	6	19	0	2	16	3	2	34	0
D 210	D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	3	3	4	13	0	1	10	3	2	21	0
D 211	D1-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	3	4	6	19	0	2	12	3	0	28	0
D 212	D1-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	3	4	6	19	0	1	12	3	1	30	0
D 213	D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	3	5	6	19	0	2	9	5	1	25	0
D 214	D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	4	5	6	19	0	2	19	5	2	36	0
D 215	D1-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	2	4	4	13	0	1	9	3	1	19	0
D 216	D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	3	3	2	6	0	1	10	3	2	24	0
D 217	D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	6	4	6	19	0	2	22	8	3	36	0
D 218	D1-34 DO YOU CHECK CAPACITORS USING OHMMETERS	41	16	20	25	18	6	50	23	9	70	0
D 219	D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	33	8	14	6	18	3	37	11	5	61	0
D 220	D1-36 DO YOU CHECK INDUCTORS USING OHMMETERS	36	12	20	25	18	4	47	20	8	63	0
D 221	D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	28	6	10	6	12	3	31	10	5	54	0
D 222	D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THETA= 0, PF = 1, AND PA = PT FOR RESONANT CIRCUITS	2	3	4	13	0	1	6	3	1	13	0
D 223	D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	4	4	4	13	0	1	12	3	1	37	0
D 224	D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS	7	5	6	13	3	2	18	8	1	38	0
D 225	D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS	7	5	8	13	6	2	15	7	1	32	0
D 226	D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	3	4	12	25	6	1	10	3	2	35	0
D 227	D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	3	4	4	13	0	1	9	2	0	25	0
D 228	D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS	5	4	8	25	0	1	13	7	1	32	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
D 229	D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS	20	4	10	13	9	3	16	8	4	46	0
D 230	D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS	17	4	12	13	12	2	12	5	1	46	0
D 231	D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE	10	5	8	13	6	2	7	5	2	38	0
D 232	D3-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS	8	4	8	13	6	2	9	3	1	34	0
D 233	D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)	8	5	6	13	3	2	7	3	1	38	0
D 234	D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS	5	4	6	13	3	3	3	0	0	20	0
D 235	D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS	4	4	4	13	0	3	4	2	1	29	0
D 236	D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS	3	3	4	13	0	3	6	2	1	30	0
D 237	D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES	2	3	4	13	0	3	7	2	1	28	0
D 238	D2-10 DO YOU USE OR REFER TO THE GENEPAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS	3	3	4	13	0	3	6	2	2	27	0
D 239	D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	66	35	31	44	24	4	37	48	17	65	0
D 240	D3-02 DO YOU INSPECT FILTER CIRCUITS	66	34	18	19	18	4	32	39	10	67	0
D 241	D3-03 DO YOU CLEAN FILTER CIRCUITS	55	29	12	13	12	4	26	23	4	51	0
D 242	D3-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	28	12	12	19	9	3	22	20	3	60	0
D 243	D3-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	61	28	18	25	15	4	25	36	8	65	0
D 244	D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS	60	29	18	31	12	4	28	28	6	69	0
D 245	D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT	59	27	24	31	21	4	29	41	13	62	0
D 246	D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	61	26	12	13	12	4	28	20	8	68	0
D 247	D3-09 DO YOU WORK WITH LOW PASS FILTERS	34	12	16	19	15	4	34	39	9	62	0
D 248	D3-10 DO YOU WORK WITH HIGH PASS FILTERS	33	13	14	19	12	4	32	36	6	62	0
D 249	D3-11 DO YOU WORK WITH BANDPASS FILTERS	28	9	12	19	9	3	28	25	4	56	0
D 250	D3-12 DO YOU WORK WITH BAND-REJECT FILTERS	20	5	10	19	6	3	16	20	4	55	0
D 251	D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	31	20	14	25	9	4	9	13	8	17	0
D 252	D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	21	7	14	19	12	2	13	10	3	44	0
D 253	D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	17	7	12	13	12	1	10	5	2	44	0
D 254	D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	14	7	12	19	9	1	10	5	2	41	0
D 255	D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	38	21	14	19	12	2	18	31	9	30	0
D 256	D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	14	7	6	13	3	2	15	16	3	53	0
D 257	D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	22	13	16	19	15	3	19	20	6	54	0
D 258	D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	13	7	6	13	3	2	15	15	4	51	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
D 259	D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT	40	21	16	25	12	3	19	25	6	24	0
D 260	D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS	3	5	2	6	0	1	9	5	2	28	0
E 261	E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	35	13	20	25	18	7	28	10	6	70	0
E 262	E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING	31	10	16	19	15	3	26	11	5	75	0
E 263	E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING	26	9	16	19	15	5	26	11	5	74	0
E 264	E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING	24	11	20	25	18	7	25	11	6	76	0
E 265	E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING	30	7	14	19	12	2	25	13	4	76	0
E 266	E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING	24	7	12	13	12	4	24	13	3	74	0
E 267	E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING	22	10	14	19	12	5	24	11	4	73	0
E 268	E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS	29	10	16	25	12	4	25	11	5	77	0
E 269	E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS	29	9	14	19	12	2	19	11	5	72	0
E 270	E1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS	22	7	8	13	6	2	18	11	5	66	0
E 271	E1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS	20	9	16	25	12	7	21	8	5	71	0
E 272	E1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS	9	6	2	0	3	1	16	0	1	15	0
E 273	E2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS	88	80	94	94	94	92	93	89	79	92	3
E 274	E2-02 DO YOU SELECT TYPE OF SOLDER TO USE	75	69	88	88	88	60	88	75	66	93	0
E 275	E2-03 DO YOU ADD FLUX TO CONNECTIONS	81	74	86	75	91	55	82	61	46	94	3
E 276	E2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS	83	65	80	69	85	42	84	56	39	88	0
E 277	E2-05 DO YOU STRIP INSULATION FROM WIRES	88	83	94	94	94	92	94	92	80	98	0
E 278	E2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS	87	79	84	94	79	48	88	79	36	97	3
E 279	E2-07 DO YOU BEND OR SHAPE WIRES OR LEADS	89	84	94	94	94	87	94	90	78	98	0
E 280	E2-08 DO YOU CUT WIRES	89	83	94	94	94	93	94	92	80	96	0
E 281	E2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS	78	78	88	94	85	92	88	87	69	90	0
E 282	E2-10 DO YOU TIN SOLDERING IRON TIPS	89	82	92	94	91	92	93	90	73	97	0
E 283	E2-11 DO YOU CLEAN SOLDERING IRON TIPS	90	83	94	94	94	92	94	92	79	98	0
E 284	E2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS	84	78	69	94	58	31	87	74	37	91	0
E 285	E2-13 DO YOU TIN OR PRE-TIN CONDUCTORS	83	72	86	88	85	64	85	80	58	94	0
E 286	E2-14 DO YOU INSPECT SOLDERED CONNECTIONS	90	83	92	94	91	92	93	90	77	97	0
E 287	E2-15 DO YOU DESOLDER CONNECTIONS BY WICKING	58	49	67	69	67	46	66	56	36	75	3
E 288	E2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING TOOLS	83	64	55	56	55	46	91	74	34	94	3
E 289	E2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS	72	62	69	88	61	55	63	75	40	78	0
E 290	E2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL	28	17	20	19	21	10	25	33	15	37	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
E 291	E2-19 DO YOU MAKE HARDWIRE CONNECTIONS	84	80	94	100	91	83	88	85	71	95	0
E 292	E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS	91	74	43	44	42	27	91	56	18	97	0
E 293	E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS	90	73	47	50	45	26	90	56	14	98	0
E 294	E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS	91	71	39	38	39	19	90	49	9	98	0
E 295	E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB	77	49	90	94	88	83	88	82	80	93	6
E 296	E3-02 DO YOU ADJUST RELAYS	38	35	22	31	18	78	57	69	69	87	3
E 297	E3-03 DO YOU CLEAN RELAYS	76	43	24	6	33	80	62	80	81	96	0
E 298	E3-04 DO YOU INSPECT RELAYS	78	47	59	50	64	78	75	84	81	95	3
E 299	E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS	78	47	80	81	79	74	82	84	69	95	6
E 300	E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS	34	26	14	13	15	63	53	56	38	77	3
E 301	E3-07 DO YOU TROUBLESHOOT RELAYS	72	45	78	69	82	75	81	82	80	97	6
E 302	E3-08 DO YOU STRAIGHTEN RELAY CONTACTS	57	35	24	19	27	77	59	72	77	90	3
E 303	E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS	68	40	20	13	24	82	62	77	81	97	3
E 304	E3-10 DO YOU PERFORM TASKS ON RELAY CORES	21	12	4	6	3	41	34	33	19	49	0
E 305	E3-11 DO YOU PERFORM TASKS ON RELAY COILS	28	18	4	6	3	48	34	30	24	66	3
E 306	E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	48	34	4	6	3	76	51	54	34	62	0
E 307	E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	49	31	6	6	6	77	53	56	48	90	0
E 308	E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPER (NO) SCHEMATIC SYMBOLS FOR RELAYS	58	30	53	56	52	37	69	56	49	96	3
E 309	E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	54	30	53	56	52	35	69	56	47	96	3
E 310	E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS	52	29	51	50	52	35	63	48	46	94	3
E 311	E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	53	28	51	50	52	35	63	46	45	95	3
E 312	E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	56	28	65	50	73	64	76	66	62	89	3
E 313	E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	60	40	71	69	73	70	66	56	33	90	3
F 314	F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	3	2	8	6	9	8	32	67	18	48	6
F 315	F1-02 DO YOU INSPECT MICROPHONES	3	1	0	0	0	8	24	74	16	40	9
F 316	F1-03 DO YOU CLEAN MICROPHONES	1	0	0	0	0	8	21	52	11	38	9
F 317	F1-04 DO YOU OPERATE MICROPHONES	3	1	8	6	9	7	21	62	16	41	9
F 318	F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT PARTS OR MICROPHONES	2	0	2	0	3	7	21	70	12	35	9
F 319	F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	1	0	0	0	0	4	13	18	6	29	0
F 320	F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	2	0	0	0	0	7	25	72	15	44	0
F 321	F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	1	0	0	0	0	4	9	15	6	26	0
F 322	F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	0	0	0	0	0	7	22	46	16	24	0
F 323	F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	0	0	0	0	0	4	3	11	4	20	0
F 324	F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	1	0	2	0	3	4	3	10	3	32	9
F 325	F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	2	1	0	0	0	4	18	44	3	27	0
F 326	F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES	0	0	0	0	0	1	0	3	1	7	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
F 327	F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	42	2	0	0	0	9	21	61	39	64	0
F 328	F2-02 DO YOU INSPECT SPEAKERS	42	1	0	0	0	8	16	62	33	66	0
F 329	F2-03 DO YOU CLEAN SPEAKERS	33	1	0	0	0	7	12	52	25	52	0
F 330	F2-04 DO YOU OPERATE SPEAKERS	38	0	0	0	0	10	13	57	32	67	0
F 331	F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT PARTS OF SPEAKERS	39	0	0	0	0	8	15	59	36	60	0
F 332	F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	3	0	0	0	0	3	6	23	12	29	0
F 333	F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	40	1	0	0	0	8	18	62	33	67	0
F 334	F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS	3	0	0	0	0	6	4	16	6	18	0
F 335	F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES	3	0	0	0	0	3	0	10	1	17	0
F 336	F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0	2	0	5	1	10	0
F 337	F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	1	0	0	0	0	2	0	10	1	13	0
F 338	F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	2	0	0	0	0	3	0	8	3	14	0
F 339	F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	2	0	0	0	0	2	1	8	3	15	0
F 340	F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	3	0	0	0	0	2	1	8	3	13	0
F 341	F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES	3	0	0	0	0	2	0	5	2	12	0
F 342	F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	87	58	69	81	64	18	90	84	5	91	0
F 343	F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS	78	46	73	94	64	16	90	84	4	91	0
F 344	F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS	83	45	59	69	55	12	85	74	3	92	0
F 345	F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS	86	52	61	94	45	16	94	84	5	92	0
F 346	F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	67	28	67	100	52	16	84	69	4	87	0
F 347	F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME	62	27	55	94	36	8	87	48	1	87	0
F 348	F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS	63	10	51	50	52	7	38	15	1	43	0
F 349	F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	86	37	41	38	42	8	85	43	2	88	0
F 350	F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	39	18	43	75	27	10	59	26	1	55	0
F 351	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	78	50	69	100	55	12	72	70	3	89	0
F 352	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	55	30	53	81	39	10	51	49	2	80	0
F 353	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	88	51	67	94	55	16	91	79	4	91	0
G 354	G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB	84	49	57	44	64	26	88	62	16	92	0
G 355	G1-02 DO YOU INSPECT DIODES	86	47	45	19	58	25	90	64	13	92	0
G 356	G1-03 DO YOU REMOVE OR REPLACE DIODES	85	48	41	25	48	25	88	61	10	95	0
G 357	G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT	82	44	55	44	61	24	88	59	12	96	0
G 358	G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES	4	3	10	6	12	1	4	2	1	26	0
G 359	G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE LIAS RESISTANCE	8	7	10	13	9	4	16	10	3	31	0
G 360	G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES	12	11	14	19	12	3	21	13	5	36	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
G 361	G1-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES	51	34	35	25	39	16	69	39	9	84	0
G 362	G1-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE	72	39	49	31	58	19	81	46	10	90	0
G 363	G1-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW	7	8	12	19	9	4	13	8	3	33	0
G 364	G1-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS RESISTANCE	47	22	35	38	33	6	56	21	6	81	0
G 365	G1-12 DO YOU USE OR REFER TO DIODE COLOR CODING	37	19	20	0	30	8	26	18	6	47	0
G 366	G1-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	3	10	19	6	1	1	0	2	12	0
G 367	G1-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	1	3	10	19	6	1	1	0	2	13	0
G 368	G1-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH AS 1N 538	60	30	35	19	42	12	66	25	7	86	0
G 369	G1-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON MOVING IN ORBIT	1	3	8	13	6	1	1	2	3	14	0
G 370	G1-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN ELECTRON MOVING IN ORBIT	1	3	10	19	6	1	1	0	3	13	0
G 371	G1-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS RESISTANCE	44	22	33	38	30	7	60	21	6	72	0
G 372	G1-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A PARTICULAR SHELL OR ORBIT	2	4	10	19	6	1	3	2	2	13	0
G 373	G1-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF AN ORBITING ELECTRON	1	4	8	13	6	1	1	2	2	11	0
G 374	G1-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN ORBITING ELECTRON	1	3	10	19	6	1	1	2	2	9	0
G 375	G1-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL)	3	4	10	19	6	1	4	2	3	17	0
G 376	G1-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF ELECTRONS IN ATOM)	1	4	10	19	6	1	4	2	3	15	0
G 377	G1-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END	74	37	47	31	55	18	81	43	16	90	0
G 378	G1-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	21	6	12	13	12	5	24	11	5	69	0
G 379	G1-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE INCREASES RESISTANCE DECREASES)	35	13	20	25	18	8	37	11	8	64	0
G 380	G1-27 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT CHARACTERISTIC CURVES (PERHAPS YOU DO THIS TO IDENTIFY POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)	8	7	14	19	12	4	13	8	2	35	0
G 381	G1-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OR INTERPRET CIRCUIT DIAGRAMS	55	25	33	31	33	8	49	28	8	79	0
G 382	G1-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR MATERIALS	4	4	8	19	3	2	9	0	3	19	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
G 383 G1-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	4	8	19	3	2	7	2	3	15	0
G 384 G1-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	4	4	8	19	3	2	9	2	2	21	0
G 385 G1-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	3	4	8	19	3	3	7	2	3	20	0
G 386 G1-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	3	6	8	19	3	1	9	0	2	19	0
G 387 G1-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	13	11	18	25	15	2	16	5	2	36	0
G 388 G1-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	3	8	8	19	3	2	7	0	2	17	0
G 389 G1-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	3	7	10	19	6	2	7	0	2	17	0
G 390 G1-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	27	13	16	19	15	7	22	18	6	59	0
G 391 G1-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	27	13	16	19	15	7	24	18	6	59	0
G 392 G1-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	7	8	10	19	6	3	12	7	4	31	0
G 393 G1-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	7	8	10	19	6	2	10	5	4	30	0
G 394 G1-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	5	7	8	19	3	3	7	2	3	23	0
G 395 G1-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	4	7	8	19	3	2	9	2	2	29	0
G 396 G1-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	5	6	10	19	6	2	9	3	3	27	0
G 397 G1-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES	37	12	22	19	24	8	32	0	1	51	0
G 398 G1-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	1	4	12	19	9	1	3	0	0	17	0
G 399 G1-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	33	16	14	0	21	8	40	23	4	78	0
G 400 G1-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	16	10	14	19	12	3	12	8	5	65	0
G 401 G1-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	12	8	12	19	9	3	12	7	4	59	0
G 402 G1-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	18	10	16	19	15	4	13	7	5	62	0
G 403 G1-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	20	10	16	31	9	4	13	5	4	63	0
G 404 G2-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.	90	65	29	31	27	11	93	74	26	95	0
G 405 G2-02 DO YOU INSPECT TRANSISTORS	89	61	27	13	33	9	91	74	18	94	0
G 406 G2-03 DO YOU REMOVE OR REPLACE TRANSISTORS	90	64	22	19	24	8	88	70	11	98	0
G 407 G2-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	84	61	27	19	30	8	91	62	13	98	0
G 408 G2-05 DO YOU USE OR REFER TO EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	78	56	27	25	27	6	82	36	14	96	0
G 409 G2-06 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	78	56	24	25	24	7	85	36	15	97	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
G 410 G2-07 DO YOU USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	78	56	24	25	24	7	82	34	14	94	0
G 411 G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	27	20	12	19	9	4	29	13	10	59	0
G 412 G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	25	20	12	19	9	5	29	13	9	57	0
G 413 G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND EMITTER)	52	37	20	19	21	6	50	36	8	66	0
G 414 G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	12	16	12	19	9	5	22	8	4	59	0
G 415 G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	88	64	31	31	30	11	96	66	21	97	0
G 416 G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	87	63	27	25	27	10	96	62	21	99	0
G 417 G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	45	33	12	6	15	7	69	39	7	93	0
G 418 G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IB IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT IE (USUALLY IB BEING 2 TO 8 PERCENT OF IE)	32	23	14	19	12	2	40	13	9	64	0
G 419 G2-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR TRANSISTORS	43	31	16	19	15	2	43	34	10	74	0
G 420 G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	13	15	12	19	9	4	25	8	6	54	0
G 421 G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	9	12	10	19	6	2	13	5	3	41	0
G 422 G2-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	4	10	10	19	6	1	12	8	5	41	3
G 423 G2-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	4	10	10	19	6	1	10	8	5	38	0
G 424 G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	3	10	10	19	6	1	10	8	5	36	0
G 425 G2-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	0	4	8	19	3	1	6	3	2	23	0
G 426 G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	4	8	19	3	1	6	3	2	23	0
G 427 G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	4	8	19	3	1	6	3	2	21	0
G 428 G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	59	13	29	38	24	8	50	43	9	87	0
G 429 G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	56	13	20	19	21	4	47	46	6	90	0
G 430 G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	32	8	14	13	15	8	34	41	6	86	0
G 431 G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	51	12	24	31	21	8	47	41	6	90	0
G 432 G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	53	12	12	19	9	3	44	30	5	90	0
G 433 G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	49	9	27	25	27	7	47	43	8	80	0
G 434 G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	53	11	8	13	6	3	43	28	2	91	0
G 435 G3-08 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE CURRENT	28	9	14	19	12	2	19	11	2	63	0
G 436 G3-09 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT	9	5	8	19	3	1	12	7	1	40	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
G 437	G3-10 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE CURRENT	26	9	12	19	9	2	13	13	1	63	0
G 438	G3-11 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT	9	5	8	19	3	1	9	5	1	45	0
G 439	G3-12 DO YOU USE OR REFER TO (COMMON EMITTER) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	28	10	12	19	9	1	16	11	1	62	0
G 440	G3-13 DO YOU USE OR REFER TO (COMMON EMITTER) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL	10	5	10	19	6	1	9	5	1	45	0
G 441	G3-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)	2	2	8	19	3	1	4	5	0	21	0
G 442	G3-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	12	4	8	19	3	1	12	7	1	37	0
G 443	G3-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	3	2	8	19	3	1	7	3	0	20	0
G 444	G3-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON EMITTER CONFIGURATION	34	6	22	38	15	3	28	28	2	66	0
G 445	G3-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON EMITTER CONFIGURATION	22	7	16	25	12	2	25	11	3	57	0
G 446	G3-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON EMITTER CONFIGURATION	16	5	12	25	6	2	22	15	2	57	0
G 447	G3-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE-EMITTER VOLTAGE INTO THE CHANGE THE BASE COLLECTOR VOLTAGE TO DETERMINE THE VOLTAGE GAIN	3	1	8	19	3	1	4	5	0	29	0
G 448	G3-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT TO DETERMINE THE CURRENT GAIN	3	1	8	19	3	1	6	3	0	30	0
G 449	G3-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE CURRENT GAIN TIMES THE VOLTAGE GAIN TO DETERMINE THE POWER GAIN	3	2	8	19	3	1	4	5	0	25	0
G 450	G3-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE INCREASES (THIS AFFECTS THE STATIC OPERATING POINT (Q) OF THE TRANSISTOR)	11	3	8	19	3	2	4	2	1	36	0
G 451	G3-24 DO YOU COMPUTE THE STATIC OPERATING POINT (Q) OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	1	0	0	0	2	4	2	0	18	0
G 452	G3-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION	23	6	10	19	6	1	22	11	2	60	0
G 453	G3-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION	20	4	10	25	3	1	21	7	1	60	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
G 454	G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION	27	4	10	25	3	2	22	8	3	58	0
G 455	G3-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION	26	4	12	25	6	1	26	8	2	62	0
G 456	G3-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION	26	4	12	25	6	1	26	8	2	61	0
G 457	G3-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION	16	4	12	25	6	1	15	8	2	56	0
G 458	G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM EMITTER (SWAMPING) RESISTOR STABILIZATION	25	6	12	25	6	1	26	10	3	62	0
G 459	G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	24	4	12	31	3	1	24	8	2	65	0
G 460	G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION	31	3	8	19	3	1	24	10	4	62	0
G 461	G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	30	4	12	25	6	1	25	8	3	63	0
G 462	G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	28	4	12	25	5	1	25	8	3	63	0
G 463	G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	19	4	12	25	6	1	13	8	3	59	0
G 464	G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	29	5	12	31	3	2	15	33	1	63	0
G 465	G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	34	6	4	13	0	2	21	30	3	73	0
G 466	G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	26	4	14	31	6	1	15	26	2	66	0
G 467	G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	15	3	12	31	3	1	13	13	1	55	0
G 468	G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	13	3	4	13	0	1	13	10	0	54	0
G 469	G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	21	3	6	13	3	1	12	20	0	65	0
G 470	G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE FOR TRANSISTOR AMPLIFIERS IN THE COMMON COLLECTOR CONFIGURATION	11	3	10	19	6	1	9	7	0	52	0
G 471	G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	16	3	14	19	12	1	10	16	1	42	0
G 472	G3-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	12	2	6	19	0	1	7	5	1	45	0
G 473	G3-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	37	7	12	25	6	2	22	23	2	85	0
G 474	G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	15	5	8	19	3	2	12	7	0	55	0
G 475	G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	19	2	12	25	6	1	13	11	1	62	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
G 476	G3-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	22	3	12	31	3	1	15	5	0	62	0
H 477	H1-01 DO YOU USE OR REFER TO VARACTORS	12	4	14	31	6	2	22	5	2	55	0
H 478	H1-02 DO YOU USE OR REFER TO TUNNEL DIODES	35	6	10	19	6	2	26	2	2	79	0
H 479	H1-03 DO YOU USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	43	8	10	19	6	4	34	8	2	88	0
H 480	H1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS	51	9	10	19	6	5	21	7	2	79	0
H 481	H1-05 DO YOU USE OR REFER TO ZENER DIODES	85	52	39	38	39	14	79	49	20	93	0
H 482	H1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	89	50	51	31	61	8	76	39	20	89	0
H 483	H2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	84	60	82	81	82	47	81	75	78	88	6
H 484	H2-02 DO YOU INSPECT POWER SUPPLIES	91	63	67	69	67	44	85	74	77	92	0
H 485	H2-03 DO YOU CLEAN POWER SUPPLIES	91	59	55	63	52	37	85	64	60	80	0
H 486	H2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES	89	50	63	63	64	30	84	64	19	88	3
H 487	H2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	87	57	59	63	58	28	78	61	60	93	3
H 488	H2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	87	57	35	50	27	30	72	51	45	94	0
H 489	H2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	70	54	71	88	64	26	79	70	76	87	0
H 490	H2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	88	56	20	31	15	31	75	49	44	94	0
H 491	H2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS	65	37	24	31	21	8	46	34	12	92	0
H 492	H2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	73	40	29	31	27	15	53	44	12	89	0
H 493	H2-11 DO YOU WORK WITH BRIDGE RECTIFIERS	80	43	39	38	39	19	57	36	17	94	0
H 494	H2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS	33	10	24	25	24	23	49	11	6	63	0
H 495	H2-13 DO YOU USE OR REFER TO INPUT VOLTAGE	78	53	49	44	52	32	79	59	38	90	0
H 496	H2-14 DO YOU USE OR REFER TO INPUT FREQUENCY	43	19	47	44	48	15	59	38	22	75	0
H 497	H2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	66	39	43	44	42	25	60	46	20	78	0
H 498	H2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE	65	38	39	38	39	29	59	41	29	85	3
H 499	H2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	72	17	22	31	18	6	32	28	3	66	0
H 500	H2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY	48	13	20	31	15	7	29	23	3	63	0
H 501	H2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	29	15	20	25	18	6	25	18	6	58	0
H 502	H2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	64	29	29	38	24	5	50	34	6	89	0
H 503	H2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	71	33	41	44	39	21	62	44	19	84	0
H 504	H2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	68	32	33	31	33	13	54	33	19	81	0
H 505	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	48	21	31	25	33	9	43	26	14	74	0
H 506	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	39	14	24	25	24	5	35	21	6	63	0
H 507	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	32	12	22	25	21	4	34	18	6	64	0
H 508	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	28	8	20	25	18	1	26	10	4	63	0
H 509	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	30	8	20	25	18	1	29	13	6	67	0
H 510	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER	43	28	22	19	24	21	26	41	20	29	3
H 511	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER	2	4	8	6	9	1	6	2	4	29	0
H 512	H3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB	59	8	55	88	39	17	66	61	4	73	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
H 513	H3-02 DO YOU INSPECT OSCILLATORS	56	9	29	31	27	9	59	52	2	77	0
H 514	H3-03 DO YOU ALIGN OR ADJUST OSCILLATORS	51	7	33	50	24	10	47	43	1	75	0
H 515	H3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	56	6	27	31	24	8	57	43	1	69	0
H 516	H3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	37	6	6	13	3	3	49	7	0	76	0
H 517	H3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	54	7	27	25	27	7	53	30	1	76	0
H 518	H3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	40	6	10	19	6	3	49	7	1	76	0
H 519	H3-08 DO YOU USE OR REFER TO FEEDBACK	38	4	14	19	12	5	35	20	2	76	0
H 520	H3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	42	5	29	38	24	4	32	15	0	71	0
H 521	H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	37	4	31	50	21	8	29	26	0	65	0
H 522	H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	42	4	35	56	24	8	38	28	1	67	0
H 523	H3-12 DO YOU USE OR REFER TO DAMPING	17	3	10	25	3	3	18	7	0	76	0
H 524	H3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	25	3	8	19	3	1	32	8	0	74	0
H 525	H3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	12	2	8	19	3	1	12	3	0	54	0
H 526	H3-15 DO YOU USE OR REFER TO CRITICAL DAMPING	7	2	8	19	3	2	9	5	0	64	0
H 527	H3-16 DO YOU USE OR REFER TO UNDER DAMPING	7	2	8	19	3	2	13	3	0	74	0
H 528	H3-17 DO YOU USE OR REFER TO OVER DAMPING	7	2	8	19	3	2	13	3	0	74	0
H 529	H3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD	22	5	10	19	6	4	34	10	1	64	0
H 530	H3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD	30	4	12	19	9	5	37	11	2	71	0
H 531	H3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD	48	5	12	19	9	2	26	7	0	67	0
H 532	H3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD	21	3	16	13	18	6	13	26	2	21	0
H 533	H3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS	18	3	10	19	6	1	29	3	0	53	0
H 534	H3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	19	3	6	19	0	1	25	5	0	57	0
H 535	H3-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	17	3	6	19	0	1	28	2	0	53	0
H 536	H3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	13	2	6	19	0	1	13	2	0	50	0
H 537	H3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	9	2	6	19	0	1	12	2	0	48	0
H 538	H3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS	32	5	16	19	15	9	31	30	3	30	0
I 539	I1-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	60	6	14	19	12	1	63	13	1	65	0
I 540	I1-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	48	5	16	19	15	1	56	7	0	70	0
I 541	I1-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS	34	4	12	19	9	1	37	5	0	64	0
I 542	I1-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	28	3	10	13	9	1	32	5	0	64	0
I 543	I1-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	51	5	14	19	12	1	54	5	0	67	0
I 544	I1-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	49	6	8	19	3	1	44	7	0	73	0
I 545	I1-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	47	5	10	19	6	1	50	5	1	64	0
I 546	I1-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS	48	4	6	19	0	1	44	5	0	72	0
I 547	I1-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	27	2	2	6	0	1	26	7	0	67	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
I 548	I1-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS	35	5	12	19	9	1	32	10	0	67	0
I 549	I1-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	26	2	2	6	0	1	15	2	0	62	0
I 550	I1-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FDD	24	3	2	6	0	1	18	5	0	25	0
I 551	I1-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	49	5	14	19	12	1	53	11	1	64	0
I 552	I1-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	50	5	14	19	12	1	54	11	1	66	0
I 553	I1-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	53	5	14	19	12	1	59	11	1	65	0
I 554	I1-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	10	4	2	6	0	1	12	3	0	26	0
I 555	I2-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	34	4	16	19	15	2	25	7	0	65	0
I 556	I2-02 DO YOU WORK WITH SERIES DIODE LIMITERS	22	4	10	19	6	2	19	3	0	61	0
I 557	I2-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	20	3	12	19	9	2	12	3	0	55	0
I 558	I2-04 DO YOU WORK WITH LIMITERS WITH BIAS	16	2	8	19	3	2	12	3	0	54	0
I 559	I2-05 DO YOU WORK WITH ZENER DIODE LIMITERS	28	3	12	19	9	1	24	8	0	58	0
I 560	I2-06 DO YOU WORK WITH TRANSISTOR LIMITERS	25	3	10	19	6	2	19	7	0	58	0
I 561	I2-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	16	1	4	0	6	1	10	2	0	19	0
I 562	I2-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	20	2	8	19	3	1	18	0	1	47	0
I 563	I2-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	16	2	8	19	3	1	13	0	0	45	0
I 564	I2-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT	16	2	8	0	12	1	12	0	0	25	0
I 565	I3-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	4	25	20	38	12	12	22	3	0	89	0
I 566	I3-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	3	25	16	25	12	11	21	5	0	90	0
I 567	I3-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	3	14	8	13	6	11	10	3	0	75	0
I 568	I3-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	1	15	14	19	12	7	19	3	0	88	0
I 569	I3-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	3	11	8	13	6	3	13	2	0	84	0
I 570	I3-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	3	19	16	31	9	8	22	3	0	88	0
I 571	I3-07 DO YOU USE OR REFER TO CUTOFF	2	11	8	19	3	2	13	2	0	64	0
I 572	I3-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	1	5	8	19	3	2	9	0	0	41	3
I 573	I3-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	1	7	8	19	3	2	9	0	0	42	0
I 574	I3-10 DO YOU USE OR REFER TO TRANSIT TIME	1	5	4	13	0	2	6	0	0	28	0
I 575	I3-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	1	5	6	13	3	3	9	0	0	32	0
I 576	I3-12 DO YOU USE OR REFER TO SATURATION	1	11	10	19	6	2	15	2	0	64	0
I 577	I3-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	1	5	10	19	6	2	9	0	0	35	0
I 578	I3-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	0	2	8	19	3	2	6	0	0	17	0
I 579	I3-15 DO YOU USE OR REFER TO PLATE VOLTAGE	2	18	12	31	3	3	21	0	0	88	0
I 580	I3-16 DO YOU USE OR REFER TO PLATE CURRENT	1	14	8	19	3	3	19	0	0	67	0
I 581	I3-17 DO YOU USE OR REFER TO GRID VOLTAGE	2	18	8	19	3	4	21	0	0	88	0
I 582	I3-18 DO YOU USE OR REFER TO GRID CURRENT	1	14	8	19	3	4	19	0	0	66	0
I 583	I3-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	2	18	8	19	3	3	19	0	0	88	0
I 584	I3-20 DO YOU USE OR REFER TO CATHODE CURRENT	1	14	8	19	3	3	18	0	0	65	0
I 585	I3-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FO) TRIODES IS DEFINED AS THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID VOLTAGE)	1	4	8	19	3	2	3	0	0	46	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
I 586	I3-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	0	2	8	19	3	2	1	0	0	25	0
I 587	I3-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	1	4	8	19	3	2	1	0	0	38	0
I 588	I3-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)	0	2	8	19	3	1	1	0	0	22	0
I 589	I3-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES	0	1	8	19	3	1	1	0	0	12	0
I 590	I3-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	2	8	19	3	2	3	0	0	30	0
I 591	I3-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	0	2	8	19	3	2	3	0	0	18	0
I 592	I3-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	0	2	8	19	3	2	1	0	0	34	0
I 593	I3-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	1	3	8	19	3	2	4	0	0	31	0
I 594	I3-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	1	3	8	19	3	2	7	0	0	34	0
I 595	I3-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	1	3	8	19	3	2	7	0	0	32	0
I 596	I3-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	1	4	8	19	3	2	7	0	0	37	0
I 597	I3-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	1	4	8	19	3	2	7	0	0	36	0
I 598	I3-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN	2	8	14	31	6	3	9	0	0	60	0
I 599	I3-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY	1	7	8	19	3	3	7	0	0	37	0
I 600	I3-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	2	5	8	13	6	6	10	2	0	54	0
I 601	I3-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	6	12	25	6	3	9	0	0	69	0
I 602	I3-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	2	7	8	19	3	3	9	0	0	77	0
I 603	I3-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	2	8	19	3	2	6	0	0	32	0
I 604	I3-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	0	1	2	6	0	1	1	0	0	14	0
I 605	I3-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	3	15	16	25	12	5	18	2	0	88	0
I 606	I3-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	3	20	16	25	12	8	19	3	0	88	0
I 607	I3-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE ELECTRON TUBES YOU WORK ON	1	2	6	13	3	2	3	0	0	23	0
I 608	I3-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	2	8	4	6	3	5	13	2	0	81	0
J 609	J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	2	4	12	25	6	5	7	0	0	77	0
J 610	J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	0	2	4	13	0	3	4	0	0	44	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
J 611 J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	1	0	2	6	0	2	1	0	0	43	0
J 612 J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	1	1	2	6	0	2	1	0	0	69	0
J 613 J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	1	0	2	6	0	1	1	0	0	50	0
J 614 J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	0	6	6	6	2	1	0	0	53	0
J 615 J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	1	1	0	0	0	5	7	0	0	26	0
J 616 J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	1	10	12	25	6	3	6	0	0	78	0
J 617 J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	2	6	12	31	3	3	10	0	0	85	0
J 618 J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	0	0	8	25	0	1	0	0	0	29	0
J 619 J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	1	0	0	0	0	1	0	0	0	37	0
J 620 J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATRONS	0	2	2	6	0	1	0	0	0	54	0
J 621 J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATRONS ARE USED	0	2	0	0	0	1	0	0	0	68	0
J 622 J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	0	1	8	19	3	2	9	0	0	64	0
J 623 J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)	0	1	6	19	0	2	7	0	0	63	0
J 624 J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)	0	1	6	19	0	1	7	0	0	58	0
J 625 J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	0	4	14	25	9	2	13	0	0	67	0
J 626 J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	0	0	8	19	3	1	3	0	0	29	0
J 627 J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	0	0	8	25	0	1	3	0	0	30	0
J 628 J2-13 DO YOU USE OR REFER TO PERSISTENCE	0	1	8	13	6	1	3	0	0	39	0
J 629 J2-14 DO YOU USE OR REFER TO DECAY TIMES	0	1	6	19	0	1	3	0	0	46	0
J 630 J2-15 DO YOU USE OR REFER TO FLUORESCENCE	0	2	8	25	0	1	6	0	0	53	0
J 631 J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	0	1	8	25	0	1	7	0	0	51	0
J 632 J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	39	13	20	0	30	8	16	18	11	10	0
J 633 J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	26	3	8	0	12	4	10	3	0	11	0
J 634 J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	22	0	6	0	9	2	7	5	0	10	0
J 635 J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	6	0	0	0	0	1	3	0	0	7	0
J 636 J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	2	0	2	0	3	1	3	0	0	6	0
J 637 J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	22	1	4	0	6	1	10	0	0	6	0
K 638 K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	4	0	0	0	0	1	1	0	0	5	0
K 639 K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS	4	0	0	0	0	1	1	0	0	3	0
K 640 K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS	4	0	0	0	0	1	1	0	0	4	0
K 641 K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS	4	0	0	0	0	1	1	0	0	3	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
K 642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	4	0	0	0	0	1	1	0	0	4	0
K 643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE COMPONENTS	4	0	0	0	0	1	1	0	0	4	0
K 644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	3	0	0	0	0	1	1	0	0	4	0
K 645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE COMPONENTS	4	0	0	0	0	1	1	0	0	3	0
K 646 K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	3	0	0	0	0	1	0	0	0	5	0
K 647 K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	3	0	0	0	0	1	0	0	0	6	0
K 648 K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	3	0	0	0	0	1	3	2	1	7	0
K 649 K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	3	0	0	0	0	1	1	2	0	6	0
K 650 K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	3	0	0	0	0	1	3	2	0	5	0
K 651 K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	3	0	0	0	0	1	1	0	0	5	0
K 652 K1-15 DO YOU PERFORM TASKS ON DETECTORS	3	0	0	0	0	1	3	0	0	4	0
K 653 K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE	1	0	0	0	0	1	1	0	0	3	0
K 654 K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	2	0	0	0	0	1	0	0	0	4	0
K 655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	2	0	0	0	0	1	0	0	0	3	0
K 656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	3	0	0	0	0	1	0	0	0	3	0
K 657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	3	0	0	0	0	1	0	0	0	2	0
K 658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	1	0	0	0	0	1	0	0	0	3	0
K 659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	2	0	0	0	0	1	0	0	0	3	0
K 660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	0	0	0	0	0	1	0	0	0	3	0
K 661 K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	2	0	0	0	0	1	0	0	0	1	0
K 662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	2	0	0	0	0	1	0	0	0	1	0
K 663 K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	2	0	0	0	0	1	0	0	0	3	0
K 664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	3	0	0	0	0	1	1	0	0	2	0
K 665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	4	0	0	0	0	1	1	0	0	4	0
K 666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	11	0	8	0	12	1	4	2	0	4	0
K 667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	9	0	8	0	12	1	1	2	0	4	0
K 668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	9	0	8	0	12	1	1	2	0	2	0
K 669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	7	0	4	0	6	1	1	2	0	2	0
K 670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	9	0	8	0	12	1	1	2	0	2	0
K 671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE COMPONENTS	9	0	6	0	9	1	1	2	0	2	0
K 672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	10	0	8	0	12	1	0	0	0	2	0
K 673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE COMPONENTS	9	0	2	0	3	1	1	2	0	3	0
K 674 K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	9	0	6	0	9	1	3	2	0	4	0
K 675 K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	9	0	6	0	9	1	3	0	0	2	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
K 676	K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	6	0	4	0	6	1	1	0	0	4	0
K 677	K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	6	0	8	0	12	1	1	0	0	4	0
K 678	K2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS	6	0	8	0	12	1	1	0	0	4	0
K 679	K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	7	0	4	0	6	2	3	0	0	3	0
K 680	K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	3	0	4	0	6	1	1	0	0	3	0
K 681	K2-16 DO YOU PERFORM TASKS ON LIMITERS	6	0	4	0	6	1	3	0	0	3	0
K 682	K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	7	0	4	0	6	1	3	0	0	3	0
K 683	K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	9	0	4	0	6	1	3	0	0	4	0
K 684	K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	9	0	4	0	6	1	3	2	0	4	0
K 685	K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	34	5	31	38	27	2	56	0	1	18	0
K 686	K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	49	9	29	31	27	3	76	0	0	32	0
K 687	K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	33	5	27	38	21	2	59	0	0	18	0
K 688	K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	34	5	29	50	18	2	57	0	0	18	0
K 689	K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	45	7	35	50	27	4	79	2	0	29	0
K 690	K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	34	5	31	50	21	2	59	0	0	19	0
K 691	K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	41	8	31	44	24	5	60	2	1	29	0
K 692	K3-08 DO YOU SUBRRACT BINARY NUMBERS USING THE END-AROUND-CARRY METHOD	34	5	20	31	15	4	38	0	0	21	0
K 693	K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	33	6	29	50	18	5	46	2	1	24	0
K 694	K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	27	5	31	69	12	4	51	0	1	20	0
L 695	L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	84	17	22	44	12	2	82	16	0	56	0
L 696	L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	47	11	14	31	6	2	60	3	0	35	0
L 697	L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	47	11	14	31	6	2	59	3	0	35	0
L 698	L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	47	11	12	19	9	2	59	3	0	34	0
L 699	L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	47	10	10	19	6	2	59	3	0	30	0
L 700	L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	70	15	12	25	6	2	72	7	0	51	0
L 701	L1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	70	16	12	25	6	2	72	7	0	51	0
L 702	L1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR LOGIC SYMBOLS WITH STATE INDICATORS	70	14	12	19	9	2	74	7	0	50	0
L 703	L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	70	14	14	25	9	2	69	7	0	50	0
L 704	L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	84	17	24	44	15	2	82	16	0	58	0
L 705	L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	84	17	24	44	15	2	82	18	0	55	0
L 706	L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES	84	17	22	38	15	2	81	18	0	57	0

PCT MBRS RESPONDING 'YES' BY DAFSC GROUPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
L 707 L1-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	83	15	20	31	15	2	78	18	0	55	0
L 708 L2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS	59	9	18	25	15	2	66	3	0	33	0
L 709 L2-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	16	4	8	19	3	1	25	0	0	19	0
L 710 L2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	10	2	4	6	3	1	12	2	0	13	0
L 711 L2-04 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	20	2	10	19	6	2	35	0	0	16	0
L 712 L2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	57	9	12	25	6	2	69	3	0	34	0
L 713 L2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	25	2	8	13	6	2	41	3	0	20	0
L 714 L2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	27	2	10	19	6	2	41	2	0	18	0
L 715 L2-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	27	7	12	19	9	1	32	3	0	26	0
L 716 L2-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	14	4	4	6	3	1	15	3	0	18	0
L 717 L2-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	58	9	16	25	12	2	65	3	0	34	0
L 718 L2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	25	5	10	19	6	2	22	2	0	16	0
L 719 L2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	39	7	16	25	12	2	28	0	0	15	0
L 720 L2-13 DO YOU WORK WITH ASTABLE (FREE RUNNING) MULTIVIBRATORS	49	8	12	25	6	2	60	3	0	39	0
L 721 L2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	56	10	16	25	12	2	66	5	0	38	0
L 722 L2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	53	8	16	25	12	3	63	3	0	39	0
L 723 L2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	58	9	18	25	15	3	68	7	0	38	0
L 724 L2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	58	8	16	25	12	3	60	3	0	38	0
L 725 L2-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	59	10	18	25	15	2	71	5	0	38	0
L 726 L2-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	47	10	10	19	6	2	63	5	0	31	0
L 727 L2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	48	8	14	19	12	2	53	3	0	35	0
L 728 L2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	48	8	12	19	9	2	54	3	0	35	0
L 729 L2-22 DO YOU MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	54	9	8	13	6	2	63	5	0	37	0
L 730 L2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	53	9	12	19	9	2	50	7	0	29	0
L 731 L2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	53	8	12	19	9	2	51	7	0	29	0
L 732 L2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	37	5	6	6	6	2	34	3	0	21	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
L 733	L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB	75	12	49	69	39	4	72	18	0	42	0
L 734	L3-02 DO YOU USE OR REFER TO UP-COUNTERS	58	11	33	50	24	3	66	8	0	41	0
L 735	L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS	56	9	24	25	24	1	63	5	0	40	0
L 736	L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	70	10	12	25	6	2	68	5	0	34	0
L 737	L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	59	7	10	19	6	1	63	5	0	30	0
L 738	L3-06 DO YOU USE OR REFER TO RING COUNTERS	41	3	6	13	3	2	59	3	0	28	0
L 739	L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	42	5	22	6	30	2	32	7	0	40	0
L 740	L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	62	5	4	0	6	2	44	2	0	38	0
L 741	L3-09 DO YOU USE OR REFER TO DOWN CLOCKS	50	7	14	19	12	1	50	2	0	36	0
L 742	L3-10 DO YOU USE OR REFER TO UP CLOCKS	52	9	16	25	12	1	50	2	0	38	0
L 743	L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	53	8	6	13	3	1	56	2	0	33	0
L 744	L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS	59	8	6	13	3	1	54	2	0	29	0
L 745	L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	41	5	6	0	9	1	34	2	0	34	0
L 746	L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	40	3	6	13	3	1	57	0	0	21	0
L 747	L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	53	7	8	13	6	1	54	0	0	26	0
L 748	L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	72	11	14	13	15	1	69	0	0	30	0
L 749	L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	58	5	16	25	12	2	44	3	0	32	0
L 750	L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	48	4	8	13	6	1	47	0	0	23	0
L 751	L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS	51	4	6	13	3	1	51	0	0	18	0
L 752	L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTERS	47	3	6	13	3	1	51	0	0	17	0
L 753	L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	51	4	14	25	9	1	46	0	0	17	0
L 754	L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	22	1	0	0	0	1	24	2	0	17	0
L 755	L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	38	2	6	13	3	1	56	3	0	29	0
L 756	L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	57	4	4	6	3	1	54	2	0	24	0
M 757	M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	41	8	18	44	6	3	34	7	0	80	0
M 758	M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	19	1	12	36	0	3	36	3	0	61	0
M 759	M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	34	5	10	31	0	2	34	5	0	69	0
M 760	M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	37	3	10	31	0	2	32	7	0	63	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
M 761	M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS	21	3	8	25	0	1	32	0	0	55	0
M 762	M1-06 DO YOU USE OR REFER TO RISE TIME	45	6	29	63	12	1	49	10	0	73	0
M 763	M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME	34	4	18	31	12	1	40	3	0	65	0
M 764	M1-08 DO YOU USE OR REFER TO SWEEP TIME	46	11	33	63	18	2	50	21	0	79	0
M 765	M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS	22	9	12	31	3	2	28	8	0	70	0
M 766	M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS	26	6	14	31	6	1	24	7	0	67	0
M 767	M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS	16	5	10	25	3	1	13	5	0	61	0
M 768	M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS	15	3	12	25	6	1	18	0	0	55	0
M 769	M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	29	41	78	100	67	18	57	69	5	69	0
M 770	M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	31	43	63	69	61	14	54	61	4	67	0
M 771	M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS	20	25	31	38	27	12	46	33	2	59	0
M 772	M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	23	24	19	56	30	10	41	34	3	54	0
M 773	M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	20	17	12	19	9	8	32	26	1	54	0
M 774	M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS	23	5	47	56	42	9	43	64	2	53	0
M 775	M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	16	7	22	31	18	2	12	5	1	51	0
M 776	M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MH	6	2	14	25	9	5	9	3	2	34	0
M 777	M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MH	3	1	10	13	9	4	1	3	1	24	0
M 778	M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	6	27	35	44	30	7	19	15	3	50	0
M 779	M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR GENERATORS	83	78	51	63	45	17	29	15	19	92	33
M 780	M3-02 DO YOU INSPECT MOTORS	81	78	35	44	30	15	21	13	15	92	15
M 781	M3-03 DO YOU CLEAN OR LUBRICATE MOTORS	82	77	27	44	18	14	19	13	7	93	24
M 782	M3-04 DO YOU OPERATE MOTORS	76	74	37	38	36	12	21	15	11	93	15
M 783	M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS	79	76	27	25	27	9	19	11	15	94	27
M 784	M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS	62	73	14	31	6	10	13	7	4	90	0
M 785	M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	75	75	33	13	42	17	21	11	16	94	30
M 786	M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	48	71	8	19	6	9	12	8	5	88	0
M 787	M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS	18	45	4	13	0	6	7	3	2	69	0
M 788	M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES	32	64	10	25	3	8	7	5	4	81	0
M 789	M3-11 DO YOU PERFORM ANY TASKS ON ROTORS	28	52	10	25	3	8	9	7	3	80	0
M 790	M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES	39	69	20	56	3	10	7	5	3	93	0
M 791	M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS	24	46	10	25	3	8	6	7	4	77	0
M 792	M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS	26	50	10	25	3	10	6	7	2	80	0
M 793	M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES	19	42	4	13	0	7	6	5	3	67	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
M 794 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	3	14	2	6	0	2	3	2	1	20	0
M 795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	14	21	8	13	6	2	7	2	2	34	3
M 796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	8	9	4	6	3	1	3	3	1	22	0
M 797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	35	76	16	25	12	5	7	2	2	76	0
M 798 M3-20 DO YOU WORK WITH INDUCTION MOTORS	37	15	14	19	12	4	7	2	3	77	15
M 799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	16	3	12	13	12	3	4	0	3	59	15
M 800 M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	39	19	24	19	27	10	7	5	3	74	18
M 801 M3-23 DO YOU INSPECT GENERATORS	53	12	22	38	15	8	9	3	3	42	0
M 802 M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	52	7	12	31	3	7	4	2	3	42	0
M 803 M3-25 DO YOU OPERATE GENERATORS	48	11	29	38	24	10	6	3	3	44	0
M 804 M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	47	8	12	13	12	4	3	2	3	38	0
M 805 M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	28	5	10	19	6	5	3	0	3	39	0
M 806 M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	46	8	24	25	24	8	3	2	3	39	0
M 807 M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	25	5	8	13	6	4	3	2	2	37	0
N 808 N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	75	66	90	100	85	70	75	74	44	88	24
N 809 N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	14	23	16	25	12	15	16	8	9	48	0
N 810 N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	18	22	16	25	12	14	25	11	8	46	0
N 811 N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	16	15	20	31	15	14	15	7	7	44	0
N 812 N1-05 DO YOU READ METER SCALES	75	67	90	100	85	71	76	72	46	93	27
N 813 N1-06 DO YOU EXTEND THE RANGE OF AMMETERS	34	31	37	38	36	36	40	31	17	53	9
N 814 N1-07 DO YOU ZERO OHMMETERS	74	66	86	94	82	71	75	75	45	94	27
N 815 N1-08 DO YOU ZERO AMMETERS	29	22	35	25	39	30	38	15	16	63	15
N 816 N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	39	36	59	69	55	40	44	30	22	63	9
N 817 N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)	44	45	59	75	52	27	43	38	23	74	3
N 818 N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	5	3	8	25	0	2	7	2	0	15	0
N 819 N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	3	0	2	0	3	1	4	2	0	15	0
N 820 N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	3	0	0	0	0	1	4	2	0	13	0
N 821 N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	3	0	2	6	0	1	1	2	0	13	0
N 822 N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	4	0	2	6	0	1	6	2	0	16	0
N 823 N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	4	0	2	6	0	1	6	2	0	16	0
N 824 N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	2	0	0	0	0	1	4	2	0	13	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
N 825	N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	3	2	4	13	0	1	6	0	0	10	0
N 826	N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE REACTORS	0	2	6	19	0	1	3	2	0	13	0
N 827	N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE REACTORS	0	0	2	6	0	1	3	2	0	13	0
N 828	N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS	2	0	2	6	0	1	6	0	0	7	0
N 829	N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE REACTORS	0	2	2	6	0	1	1	0	0	7	0
N 830	N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN SATURABLE REACTORS	0	2	4	13	0	1	6	0	0	9	0
N 831	N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE REACTORS	0	2	4	13	0	1	4	0	0	8	0
N 832	N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN SATURABLE REACTORS	0	2	6	19	0	1	4	2	0	9	0
N 833	N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	1	2	6	19	0	1	4	2	0	11	0
N 834	N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT JOB	49	12	18	44	6	2	43	13	0	53	0
N 835	N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	20	6	6	19	0	2	24	3	0	47	0
N 836	N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	38	9	16	44	3	2	41	11	0	54	0
N 837	N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	27	6	14	38	3	2	37	11	0	49	0
N 838	N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	19	5	16	44	3	2	32	7	0	51	0
N 839	N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	31	5	6	13	3	2	26	5	0	51	0
N 840	N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	35	9	8	19	3	2	29	7	0	50	0
N 841	N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	22	5	10	25	3	2	24	7	1	43	0
N 842	N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION	9	2	6	13	3	2	7	3	0	36	0
N 843	N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	44	8	16	44	3	1	34	8	0	60	0
N 844	N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	22	3	14	38	3	1	10	3	0	46	0
O 845	O1-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR PRESENT JOB	0	0	0	0	0	1	0	0	0	3	0
O 846	O1-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	1	0	0	0	3	0
O 847	O1-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	1	0	0	0	3	0
O 848	O1-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	1	0	0	0	3	0
O 849	O1-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	1	0	0	0	3	0
O 850	O1-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	1	0	0	0	3	0
O 851	O1-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	1	0	0	0	3	0
O 852	O1-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE COMPONENTS	0	0	0	0	0	1	0	0	0	3	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
0 853	01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	0	0	0	0	0	1	0	0	0	3	0
0 854	01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0	1	0	0	0	3	0
0 855	01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	0	0	0	0	0	1	0	0	1	2	0
0 856	01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	0	0	0	0	0	1	0	0	0	2	0
0 857	01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	0	0	0	0	0	1	0	0	0	2	0
0 858	01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	0	0	0	0	0	1	0	0	0	2	0
0 859	01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	0	0	0	0	0	1	0	0	0	2	0
0 860	01-16 DO YOU PERFORM TASKS ON SSB MIXERS	0	0	0	0	0	1	0	0	0	2	0
0 861	01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	0	0	0	0	0	1	0	0	0	2	0
0 862	01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
0 863	01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
0 864	01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0	0	0	0	0	1	0	0	0	2	0
0 865	01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
0 866	01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0	0	0	0	0	1	0	0	0	2	0
0 867	01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB SYSTEM STAGES	0	0	0	0	0	1	0	0	0	3	0
0 868	01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0	1	0	0	0	3	0
0 869	01-25 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	1	0	0	0	3	0
0 870	01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	0	0	0	0	1	0	0	0	3	0
0 871	01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0	0	0	0	0	1	0	0	0	3	0
0 872	01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0	0	0	0	0	1	0	0	0	3	0
0 873	01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	1	0	0	0	3	0
0 874	01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	1	0	0	0	3	0
0 875	02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	3	0	10	19	6	1	21	3	1	9	0
0 876	02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	3	0	6	13	3	2	16	2	1	9	0
0 877	02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	3	0	2	6	0	1	12	2	1	9	0
0 878	02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	3	0	4	13	0	1	7	0	0	8	0
0 879	02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	3	0	6	6	6	1	18	2	1	9	0
0 880	02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS	3	0	2	6	0	1	15	0	1	9	0
0 881	02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	3	0	6	6	6	1	13	2	1	9	0
0 882	02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEM COMPONENTS	3	0	0	0	0	1	15	0	1	8	0
0 883	02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	1	0	4	6	3	1	16	0	0	8	0
0 884	02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	0	0	6	6	6	1	7	0	0	8	0
0 885	02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0	0	2	0	3	1	13	0	0	7	0
0 886	02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0	0	4	0	6	1	1	0	0	5	0
0 887	02-13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0	0	4	6	3	1	3	0	1	7	0
0 888	02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	3	0	6	13	3	1	6	3	1	6	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
0 889 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	3	0	4	13	0	1	10	3	1	8	0
0 890 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES	1	0	0	0	0	1	3	2	0	7	0
0 891 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	3	0	0	0	0	1	13	3	1	8	0
0 892 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	3	0	4	13	0	1	16	3	0	8	0
0 893 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS	0	0	0	0	0	1	1	0	0	7	0
0 894 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0	0	4	6	3	1	6	2	0	8	0
0 895 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0	0	2	0	3	1	1	0	0	4	0
0 896 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS	1	0	2	0	3	1	3	2	0	5	0
0 897 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS	1	0	4	0	6	1	10	2	0	6	0
0 898 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS	1	0	2	0	3	1	1	0	0	5	0
0 899 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS	2	0	4	6	3	1	9	3	0	7	0
0 900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS	0	0	0	0	0	1	1	0	0	3	0
0 901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS	0	0	0	0	0	1	1	0	0	3	0
0 902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES	2	0	4	6	3	1	4	2	0	4	0
0 903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	1	0	2	6	0	1	10	0	0	5	0
0 904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	1	0	2	6	0	1	10	2	0	5	0
0 905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	2	0	8	13	6	1	15	3	0	5	0
0 906 02-32 DO YOU USE OR REFER TO PULSE SHAPE	3	0	4	6	3	1	15	2	0	5	0
0 907 02-33 DO YOU USE OR REFER TO PEAK POWER	2	0	2	6	0	1	9	2	0	4	0
0 908 02-34 DO YOU USE OR REFER TO AVERAGE POWER	1	0	2	6	0	1	6	2	0	4	0
0 909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	2	6	0	1	3	0	0	4	0
0 910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	2	6	0	1	9	0	0	5	0
0 911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	0	0	2	6	0	1	3	0	0	4	0
0 912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	3	0	2	0	3	1	12	2	0	6	0
0 913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	3	0	2	0	3	1	12	2	0	5	0
0 914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	0	0	24	6	33	1	0	0	1	5	30
0 915 03-02 DO YOU INSPECT ANTENNAS	0	0	19	0	27	1	0	0	1	5	33

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
0 916 03-03 DO YOU CLEAN ANTENNAS	0	0	12	0	18	1	0	0	0	4	27
0 917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	0	0	8	0	12	1	0	0	1	4	3
0 918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	0	0	0	0	0	1	0	0	1	3	0
0 919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS	0	0	22	0	33	1	0	0	1	4	15
0 920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS	1	0	2	0	3	1	0	0	0	4	27
0 921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS	0	0	22	0	33	1	0	0	1	5	15
0 922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	0	0	0	0	0	1	0	0	0	4	30
0 923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	0	0	0	0	0	1	0	0	0	3	0
0 924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	0	0	0	0	0	1	0	0	0	3	0
0 925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	0	0	0	0	0	1	0	0	0	3	0
0 926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS INDUCTIVE LOADS TO THE GENERATOR	0	0	0	0	0	1	0	0	0	4	0
0 927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR	0	0	0	0	0	1	0	0	0	4	0
0 928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOR	0	0	0	0	0	1	0	0	0	3	0
0 929 03-16 DO YOU WORK WITH HERTZ ANTENNAS	0	0	2	0	3	1	0	0	0	5	0
0 930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	0	0	0	0	0	1	0	0	0	4	0
0 931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	0	0	0	0	0	1	0	0	1	2	0
0 932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	0	0	0	0	0	1	0	0	0	2	0
0 933 03-20 DO YOU WORK WITH CARDIOID ARRAYS	0	0	0	0	0	1	0	0	0	2	0
0 934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS	0	0	0	0	0	1	0	0	0	2	0
0 935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	0	0	1	0	0	0	3	0
0 936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	0	0	0	0	0	1	0	0	0	3	0
0 937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	0	0	2	0	3	1	0	0	0	3	12
0 938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	0	0	1	0	0	0	3	0
0 939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	0	0	0	0	0	1	0	0	0	3	0
0 940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	0	0	0	0	0	1	0	0	0	3	0
0 941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	0	0	0	0	0	1	0	0	0	3	0
0 942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	0	0	2	0	3	1	0	0	0	3	0
0 943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	0	0	0	0	0	1	0	0	0	3	0
0 944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS	0	0	0	0	0	1	0	0	0	3	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-ISK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
O 945	03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	0	0	0	0	0	1	0	0	0	2	0
O 946	03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	0	0	0	0	0	1	0	0	0	2	0
O 947	03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	0	0	0	0	0	1	0	0	0	2	0
O 948	03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS	0	0	6	0	9	1	0	0	1	2	9
O 949	03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	0	0	14	0	21	1	0	0	0	3	0
O 850	03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	0	0	4	0	6	1	0	0	0	4	0
O 851	03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY	0	0	8	0	12	1	0	0	1	3	12
O 852	03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS	0	0	2	0	3	1	0	0	0	2	0
P 953	P1-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS BETWEEN RECEIVERS AND ANTENNAS, TELEPHONE LEADS, AS WELL AS HIGH VOLTAGE POWER LINES, ETC. DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES	9	8	8	0	12	74	46	54	66	6	0
P 954	P1-02 DO YOU REFER TO OR USE COPPER LOSS OR I2R LOSS IN TRANSMISSION LINES	0	0	0	0	0	9	1	5	6	3	0
P 955	P1-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES	0	0	0	0	0	6	0	2	3	3	0
P 956	P1-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	2	0	2	0	3	4	1	2	2	2	0
P 957	P1-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES	0	0	2	0	3	9	1	5	5	2	0
P 958	P1-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	2	0	2	0	3	23	4	3	8	3	0
P 959	P1-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	5	5	0	0	0	57	35	38	52	1	0
P 960	P1-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES	4	4	0	0	0	42	29	26	37	2	0
P 961	P1-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	1	3	0	0	0	27	21	21	31	2	0
P 962	P1-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	6	4	10	0	15	13	21	13	19	5	0
P 963	P1-11 DO YOU WOPK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	3	1	4	0	6	7	7	2	10	3	0
P 964	P1-12 DO YOU TROUBLESHOOT TRANSMISSION LINES	5	5	2	0	3	66	37	51	62	4	0
P 965	P1-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)	1	2	0	0	0	17	7	11	8	2	0
P 966	P1-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	1	0	0	0	0	5	1	7	6	3	0
P 967	P1-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	3	4	2	0	3	30	12	36	32	5	0
P 968	P1-16 DO YOU MEASURE STANDING WAVE RATIOS (SR) OF TRANSMISSION LINES	1	1	2	0	3	1	0	3	2	2	0
P 969	P1-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	1	0	2	2	1	0
P 970	P1-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS	0	0	0	0	0	3	3	5	3	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
P 971 P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	2	2	0	0	0	14	4	30	10	4	0
P 972 P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	0	0	0	0	0	3	1	2	3	1	0
P 973 P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	9	6	2	17	1	0
P 974 P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES	2	0	0	0	0	9	1	7	6	1	0
P 975 P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES	1	0	0	0	0	5	1	3	3	1	0
P 976 P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES	0	0	0	0	0	6	4	3	6	1	0
P 977 P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	0	0	0	0	0	1	1	0	2	1	0
P 978 P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES	0	0	0	0	0	3	1	2	2	1	0
P 979 P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES	0	0	2	0	3	2	1	0	3	2	0
P 980 P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES	0	0	0	0	0	6	1	3	6	2	0
P 981 P1-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES	0	1	0	0	0	16	7	7	11	1	0
P 982 P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES	1	0	0	0	0	8	4	8	11	1	0
P 983 P1-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	0	0	0	0	0	2	1	2	3	1	0
P 984 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	0	0	22	0	33	1	0	0	0	2	0
P 985 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS	0	0	18	0	27	1	0	0	0	2	0
P 986 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS	0	0	6	0	9	1	0	0	0	1	0
P 987 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS	0	0	2	0	3	1	0	0	0	1	0
P 988 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS	1	0	2	0	3	1	0	0	0	1	0
P 989 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS	0	0	2	0	3	1	0	0	0	1	0
P 990 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS	0	0	4	0	6	1	0	0	0	1	0
P 991 P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS	0	0	12	0	18	1	0	0	0	2	0
P 992 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES	0	0	24	0	36	1	0	0	0	1	0
P 993 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS	0	0	24	0	36	1	0	0	0	1	0
P 994 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS	0	0	6	0	9	1	0	0	0	1	0
P 995 P2-12 DO YOU REMOVE OR INSTALL E BENDS	0	0	0	0	0	1	0	0	0	1	0
P 996 P2-13 DO YOU REMOVE OR INSTALL H BENDS	0	0	0	0	0	1	0	0	0	1	0
P 997 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS	0	0	8	0	12	1	0	0	0	1	0
P 998 P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS	0	0	2	0	3	1	0	0	0	1	0
P 999 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS	0	0	2	0	3	1	0	0	0	1	0
P1000 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS	0	0	4	0	6	1	0	0	0	1	0
P1001 P2-18 DO YOU REMOVE OR INSTALL BIDIRECTIONAL COUPLERS	0	0	2	0	3	1	0	0	0	1	0
P1002 P2-19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-ISK		SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
P1003	P2-20 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1004	P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1005	P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1006	P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1007	P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0	2	0	0	0	1	0
P1008	P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0	1	0	0	0	1	0
P1009	P2-26 DO YOU USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS	0	0	0	0	0	1	0	0	0	1	0
P1010	P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS OF THE OPERATING FREQUENCY	0	0	0	0	0	1	0	0	0	1	0
P1011	P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 USED AS AN AVERAGE	0	0	0	0	0	1	0	0	0	1	0
P1012	P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF	0	0	0	0	0	1	0	0	0	1	0
P1013	P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	0	0	0	0	0	1	0	0	0	1	0
P1014	P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1015	P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1016	P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1017	P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0	1	0	0	0	1	0
P1018	P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	1	0	0	0	2	0
P1019	P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	1	0	0	0	2	0
P1020	P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0	1	0	0	0	1	0
P1021	P2-38 ARE APERTURES (WINDOWS OR IRISES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	2	0	3	1	0	0	0	1	0
P1022	P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	8	0	12	1	0	0	0	1	0
P1023	P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	1	0	0	0	1	0
P1024	P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	1	0	0	0	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
P1025	P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0	1	0	0	0	1	0
P1026	P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	2	0	3	1	0	0	0	1	0
P1027	P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	2	0	3	1	0	0	0	1	0
P1028	P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	16	0	24	1	0	0	0	1	0
P1029	P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	0	0	0	0	0	1	0	0	0	2	0
P1030	P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	0	0	0	0	0	1	0	0	0	2	0
P1031	P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	0	0	0	0	0	1	0	0	0	1	0
P1032	P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	0	0	2	0	3	1	0	0	0	1	0
P1033	P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	0	0	0	0	0	1	0	0	0	2	0
P1034	P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS	0	0	6	0	9	1	0	0	0	12	0
P1035	P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE	0	0	0	0	0	1	0	0	0	9	0
P1036	P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME	0	0	0	0	0	1	0	0	0	4	0
P1037	P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE	0	0	0	0	0	1	0	0	0	5	0
P1038	P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	0	0	2	0	3	1	0	0	0	8	0
P1039	P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	0	0	0	0	0	1	0	0	0	6	0
P1040	P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	0	0	0	0	0	1	0	0	0	5	0
P1041	P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	0	0	0	0	0	1	0	0	0	3	0
P1042	P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	0	0	0	0	0	1	0	0	0	2	0
P1043	P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	0	0	0	0	0	1	0	0	0	3	0
P1044	P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	0	0	6	0	9	1	0	0	0	2	0
P1045	P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1046	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1047	P3-14 DO YOU WORK WITH MAGNETRONS	0	0	0	0	0	1	0	0	0	10	0
P1048	P3-15 DO YOU INSPECT KLYSTRONS OR TWT	0	0	6	0	9	1	0	0	0	4	0
P1049	P3-16 DO YOU CLEAN KLYSTRONS OR TWT	0	0	4	0	6	1	0	0	0	3	0
P1050	P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	0	0	2	0	3	1	0	0	0	4	0
P1051	P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	0	0	2	0	3	1	0	0	0	3	0
P1052	P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	0	0	6	0	9	1	0	0	0	3	0
P1053	P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	0	0	0	0	0	1	0	0	0	4	0
P1054	P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	0	0	6	0	9	1	0	0	0	4	0
P1055	P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	0	0	0	0	0	1	0	0	0	2	0
P1056	P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1057	P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1058	P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
P1059 P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1060 P3-27 DO YOU PEPFORM OFERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1061 P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0	1	0	0	0	2	0
P1062 P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	0	0	0	0	0	1	0	0	0	2	0
P1063 P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	0	0	0	0	0	1	0	0	0	2	0
P1064 P3-31 DO YOU INSPECT MAGNETRONS	0	0	0	0	0	1	0	0	0	12	0
P1065 P3-32 DO YOU CLEAN MAGNETRONS	0	0	2	0	3	1	0	0	0	9	0
P1066 P3-33 DO YOU ADJUST MAGNETRONS	0	0	0	0	0	1	0	0	0	8	0
P1067 P3-34 DO YOU TUNE MAGNETRONS	0	0	0	0	0	1	0	0	0	9	0
P1068 P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	0	0	0	0	0	1	0	0	0	12	0
P1069 P3-36 DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0	1	0	0	0	11	0
P1070 P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0	1	0	0	0	12	0
P1071 P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0	1	0	0	0	9	0
P1072 P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES	0	0	0	0	0	1	0	0	0	9	0
P1073 P3-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES	0	0	0	0	0	1	0	0	0	3	0
P1074 P3-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS	0	0	0	0	0	1	0	0	0	9	0
P1075 P3-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS	0	0	0	0	0	1	0	0	0	3	0
P1076 P3-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES	0	0	0	0	0	1	0	0	0	2	0
P1077 P3-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER GRIDS	0	0	0	0	0	1	0	0	0	2	0
P1078 P3-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS BUNCHER CAVITIES	0	0	0	0	0	1	0	0	0	2	3
P1079 P3-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS	0	0	0	0	0	1	0	0	0	9	0
P1080 P3-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES	0	0	0	0	0	1	0	0	0	9	0
P1081 P3-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REPELLER (REFLECTOR) PLATES	0	0	0	0	0	1	0	0	0	2	0
P1082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS	0	0	0	0	0	1	0	0	0	3	0
P1083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS	0	0	0	0	0	1	0	0	0	2	0
P1084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES	0	0	0	0	0	1	0	0	0	2	0
P1085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS	0	0	0	0	0	1	0	0	0	2	0
P1086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS	0	0	0	0	0	1	0	0	0	3	0
P1087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES	1	0	0	0	0	1	0	0	0	3	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
P1088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	0	0	0	0	0	1	0	0	0	2	0
P1089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	0	0	4	0	6	1	0	0	0	4	0
P1090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	0	0	2	0	3	1	0	0	0	4	0
P1091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	0	0	0	0	0	1	0	0	0	3	0
P1092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	0	0	2	0	3	1	0	0	0	3	0
P1093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES	0	0	2	0	3	1	0	0	0	3	0
P1094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	0	0	2	0	3	1	0	0	0	3	0
P1095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0	1	0	0	0	3	0
P1096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	0	0	2	0	3	1	0	2	0	3	0
P1097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0	1	0	0	0	2	0
P1098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0	1	0	0	0	2	0
P1099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES	0	0	0	0	0	1	0	0	0	2	0
P1100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0	1	0	0	0	2	0
P1101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0	1	0	0	0	2	0
P1102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-BIAS BATTERIES	0	0	0	0	0	1	0	0	0	2	0
P1103 P3-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0	1	0	0	0	8	0
P1104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0	1	0	0	0	6	0
P1105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0	1	0	0	0	7	0
P1106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	1	0	0	0	0	1	0	0	0	8	0
P1107 P3-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	1	0	0	0	0	1	0	0	0	7	0
P1108 P3-75 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0	1	0	0	0	9	0
P1109 P3-76 DO YOU PERFORM TASKS ON MAGNETS	0	0	0	0	0	1	0	0	0	8	0
Q1110 Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	73	13	20	19	21	2	82	0	3	29	0
Q1111 Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	82	19	22	19	24	2	84	0	0	29	0
Q1112 Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	77	18	14	19	12	2	81	0	0	27	0
Q1113 Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	68	12	12	19	9	2	79	0	0	27	0
Q1114 Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	79	20	6	6	6	2	79	0	0	28	0
Q1115 Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	70	15	8	13	6	4	71	2	0	27	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
Q1116 Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED	70	15	12	13	12	2	72	0	1	26	0
Q1117 Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	78	7	41	69	27	3	81	3	0	31	0
Q1118 Q2-02 DO YOU USE OR REFER TO DELAY LINES	31	2	14	25	9	1	46	2	0	10	0
Q1119 Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	75	2	14	25	9	2	82	0	0	10	0
Q1120 Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	9	1	24	56	9	2	24	0	0	7	0
Q1121 Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	8	2	18	31	12	3	40	0	0	10	0
Q1122 Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	59	2	20	38	12	1	53	0	0	15	0
Q1123 Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	56	2	20	31	15	1	75	0	0	12	0
Q1124 Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	17	1	10	19	6	1	35	0	0	7	0
Q1125 Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	28	2	6	6	6	1	43	0	0	13	0
Q1126 Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D) CONVERTERS, OR BINARY-TO-DECIMAL READOUT CONVERTERS	44	1	29	19	33	1	29	0	1	32	0
Q1127 Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES	13	0	6	13	3	1	12	0	1	13	0
Q1128 Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS	8	0	6	6	6	1	7	0	0	13	0
Q1129 Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	12	0	6	13	3	1	12	0	0	18	0
Q1130 Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	12	0	10	13	9	1	12	0	0	21	0
Q1131 Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	15	0	8	13	6	1	10	0	1	21	0
Q1132 Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	16	0	12	13	12	1	13	0	0	21	0
Q1133 Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	9	0	10	13	9	1	9	0	0	21	0
Q1134 Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	10	1	4	0	6	1	10	0	0	12	0
Q1135 Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	11	0	10	13	9	1	6	0	0	22	0
Q1136 Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	15	0	6	13	3	1	6	0	0	22	0
Q1137 Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	14	0	8	13	6	1	7	0	0	21	0
Q1138 Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	14	0	10	13	9	1	6	0	0	23	0
Q1139 Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	8	0	8	6	9	1	6	0	0	17	0

PCT MBRS RESPONDING 'YES' BY DAFSC GROUPS — GPS700 PAGE 130 — AF HUMAN RESOURCES LABORATORY AIR FORCE SYSTEMS COMMAND

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK		SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
R1140	R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB	1	0	0	0	0	1	0	0	0	5	0
R1141	R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS	64	11	12	19	9	1	63	13	0	32	0
R1142	R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS	57	9	12	19	9	1	60	11	0	30	0
R1143	R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS	62	9	10	13	9	1	62	11	0	31	0
R1144	R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES	9	8	22	19	24	23	29	5	16	37	0
R1145	R3-02 DO YOU FABRICATE COAXIAL CABLES	9	6	18	13	21	8	13	2	3	37	0
S1146	S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS	30	10	45	31	52	5	63	11	5	64	0
S1147	S1-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS	10	8	20	0	30	1	16	0	0	52	0
S1148	S1-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA	3	2	4	0	6	1	12	0	0	17	0
S1149	S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB	22	2	29	81	3	1	13	0	0	83	0
S1150	S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS	3	0	2	0	3	1	0	3	0	36	0
S1151	S3-02 DO YOU MEASURE EXCITATION FREQUENCIES	1	0	2	0	3	1	0	0	0	19	0
S1152	S3-03 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS	2	0	2	0	3	1	0	2	0	22	0
S1153	S3-04 DO YOU USE OR REFER TO EXCITATION FREQUENCIES	1	0	0	0	0	1	0	0	0	20	0
S1154	S3-05 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	1	0	0	0	0	1	0	2	0	21	0
S1155	S3-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	1	0	2	0	3	1	0	3	0	32	0
S1156	S3-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	3	0	0	0	0	1	0	2	0	30	0
S1157	S3-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	3	0	2	0	3	1	0	0	0	30	0
S1158	S3-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	3	0	2	0	3	1	0	0	0	32	0
T1159	T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS	10	0	2	0	3	1	0	0	0	21	0
T1160	T1-02 DO YOU INSPECT INFRARED SYSTEMS	10	0	2	0	3	1	0	0	0	21	0
T1161	T1-03 DO YOU CLEAN INFRARED SYSTEMS	10	0	2	0	3	1	0	0	0	21	0
T1162	T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS	7	0	2	0	3	1	0	0	0	20	0
T1163	T1-05 DO YOU OPERATE INFRARED SYSTEMS	9	0	2	0	3	1	0	0	0	19	0
T1164	T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS	9	0	2	0	3	1	0	0	0	21	0
T1165	T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS	8	0	2	0	3	1	0	0	0	20	0
T1166	T1-08 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS	7	0	0	0	0	1	0	0	0	20	0
T1167	T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS	9	0	2	0	3	1	0	0	0	20	0
T1168	T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS	8	0	0	0	0	1	0	0	0	20	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
T1169 T1-11 DO YOU USE OR REFER TO FAR REGION	0	0	0	0	0	1	0	0	0	7	0
T1170 T1-12 DO YOU USE OR REFER TO INTERMEDIATE REGION	0	0	0	0	0	1	0	0	0	7	0
T1171 T1-13 DO YOU USE OR REFER TO NEAR REGION	0	0	0	0	0	1	0	0	0	6	0
T1172 T1-14 DO YOU USE OR REFER TO MICRON	0	0	0	0	0	1	0	0	0	12	0
T1173 T1-15 DO YOU USE OR REFER TO GRAY BODIES	0	0	0	0	0	1	0	0	0	3	0
T1174 T1-16 DO YOU USE OR REFER TO BLACK BODIES	1	0	0	0	0	1	0	0	0	5	0
T1175 T1-17 DO YOU USE OR REFER TO ABSORPTION	0	0	0	0	0	1	0	0	0	13	0
T1176 T1-18 DO YOU USE OR REFER TO SCATTERING	0	0	0	0	0	1	0	0	0	11	0
T1177 T1-19 DO YOU USE OR REFER TO ABSOLUTE ZERO	0	0	0	0	0	1	0	0	0	9	0
T1178 T1-20 DO YOU PERFORM TASKS ON BLITZ	0	0	0	0	0	1	0	0	0	2	0
T1179 T1-21 DO YOU PERFORM TASKS ON TARGET BUTTONS	0	0	2	6	0	1	0	0	0	2	0
T1180 T1-22 DO YOU PERFORM TASKS ON ERECTOR LENSES	0	0	2	6	0	1	0	0	0	3	0
T1181 T1-23 DO YOU PERFORM TASKS ON OCULAR LENSES	1	0	2	6	0	1	0	0	0	7	0
T1182 T1-24 DO YOU PERFORM TASKS ON CORRECTION LENSES	2	0	2	6	0	1	0	0	0	4	0
T1183 T1-25 DO YOU PERFORM TASKS ON FILTERS	3	0	2	6	0	1	0	0	0	12	0
T1184 T1-26 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS	0	0	0	0	0	1	0	0	0	8	0
T1185 T1-27 DO YOU PERFORM TASKS ON PLANE MIRRORS	0	0	2	6	0	1	0	0	0	8	0
T1186 T2-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS	0	0	0	0	0	1	0	0	0	9	0
T1187 T2-02 DO YOU INSPECT LASER SYSTEMS	0	0	0	0	0	1	0	0	0	9	0
T1188 T2-03 DO YOU CLEAN LASER SYSTEMS	0	0	0	0	0	1	0	0	0	8	0
T1189 T2-04 DO YOU OPERATE LASER SYSTEMS	0	0	0	0	0	1	0	0	0	7	0
T1190 T2-05 DO YOU OPERATE LASER SYSTEMS	0	0	0	0	0	1	0	0	0	6	0
T1191 T2-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS	0	0	0	0	0	1	0	0	0	7	0
T1192 T2-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS	0	0	2	0	3	1	0	0	0	6	0
T1193 T2-08 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS	0	0	0	0	0	1	0	0	0	6	0
T1194 T2-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS	0	0	0	0	0	1	0	0	0	7	0
T1195 T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS	0	0	0	0	0	1	0	0	0	6	0
T1196 T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)	0	0	0	0	0	1	0	0	0	4	0
T1197 T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS	0	0	0	0	0	1	0	0	0	4	0
T1198 T2-13 DO YOU USE OR REFER TO GROUND STATE	0	0	0	0	0	1	0	0	0	4	0
T1199 T2-14 DO YOU USE OR REFER TO EXCITED STATE	0	0	0	0	0	1	0	0	0	3	0
T1200 T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION	0	0	0	0	0	1	0	0	0	3	0
T1201 T2-16 DO YOU USE OR REFER TO PHOTONS	0	0	0	0	0	2	0	0	0	3	0
T1202 T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSION	0	0	0	0	0	1	0	0	0	4	3
T1203 T2-18 DO YOU USE OR REFER TO STIMULATED EMISSION	0	0	0	0	0	1	0	0	0	4	0
T1204 T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE	0	0	0	0	0	1	0	0	0	3	0
T1205 T2-20 DO YOU USE OR REFER TO INVERSION LEVEL	0	0	0	0	0	1	0	0	0	3	0
T1206 T2-21 DO YOU USE OR REFER TO MONOCHROMATIC	0	0	0	0	0	1	0	0	0	4	0
T1207 T2-22 DO YOU WORK WITH ACTIVE MATERIALS	0	0	0	0	0	1	0	0	0	2	0
T1208 T2-23 DO YOU WORK WITH PUMPING SOURCES	0	0	0	0	0	1	0	0	0	3	0
T1209 T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	0	0	0	0	0	1	0	0	0	3	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
T1210	T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS	0	0	0	0	0	1	0	0	0	3	0
T1211	T2-26 DO YOU WORK WITH HELICAL FLASHTUBES	0	0	0	0	0	1	0	0	0	3	0
T1212	T2-27 DO YOU WORK WITH RUBY	0	0	0	0	0	1	0	0	0	3	0
T1213	T2-28 DO YOU WORK WITH HELIUM-NEON	0	0	0	0	0	1	0	0	0	2	0
T1214	T2-29 DO YOU WORK WITH HELIUM-XENON	0	0	0	0	0	1	0	0	0	2	0
T1215	T2-30 DO YOU WORK WITH XENON	0	0	0	0	0	1	0	0	0	2	0
T1216	T2-31 DO YOU WORK WITH CESIUM-HELIUM	0	0	0	0	0	1	0	0	0	2	0
T1217	T2-32 DO YOU WORK WITH ARGON	0	0	0	0	0	1	0	0	0	2	0
T1218	T2-33 DO YOU WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	1	0	0	0	3	0
T1219	T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	1	0	0	0	2	0
T1220	T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE TUBES (MMST)	1	0	4	0	6	1	3	0	0	13	0
T1221	T3-02 DO YOU INSPECT DVST OR MMST	1	0	2	0	3	1	0	0	0	13	0
T1222	T3-03 DO YOU CLEAN DVST OR MMST	1	0	2	0	3	1	0	0	0	12	0
T1223	T3-04 DO YOU ADJUST OR CALIBRATE DVST OR MMST	1	0	0	0	0	1	0	0	0	12	0
T1224	T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR MMST	1	0	0	0	0	1	0	0	0	13	0
T1225	T3-06 DO YOU TROUBLESHOOT DVST OR MMST CIRCUITS	1	0	0	0	0	1	0	0	0	13	0
T1226	T3-07 DO YOU REMOVE OR REPLACE DVST OR MMST TUBES FROM MAJOR ASSEMBLIES OR UNITS	1	0	2	0	3	1	0	0	0	13	0
T1227	T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	1	0	0	0	0	1	0	0	0	9	0
T1228	T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF MMST	0	0	0	0	0	1	0	0	0	7	0
T1229	T3-10 DO YOU PERFORM TASKS ON FLOOD GUNS	0	0	0	0	0	1	0	0	0	8	0
T1230	T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	1	0	0	0	0	1	1	0	0	8	0
T1231	T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	1	0	0	0	7	0
T1232	T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	1	0	0	0	0	1	0	0	0	6	0
T1233	T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	1	0	0	0	0	1	4	0	0	10	0
U1234	U1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY PROGRAMMING TASKS	9	2	39	31	42	1	79	0	0	1	0
U1235	U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	3	0	14	19	12	1	59	0	0	3	0
U1236	U1-03 DO YOU USE OR REFER TO PROGRAMS	5	1	33	31	33	1	68	0	0	3	0
U1237	U1-04 DO YOU USE OR REFER TO HEXIDECIMAL SYSTEMS	1	0	2	0	3	1	35	0	0	3	0
U1238	U1-05 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS	1	0	6	13	3	1	51	0	0	2	0
U1239	U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	0	0	2	0	3	1	12	0	0	2	0
U1240	U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	5	1	22	38	15	1	74	0	0	2	0
U1241	U1-08 DO YOU USE OR REFER TO TIME-SHARING	3	0	6	0	9	1	51	0	0	2	0
U1242	U1-09 DO YOU USE OR REFER TO DATA WORDS	3	0	35	25	39	1	63	0	0	3	0
U1243	U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	4	2	29	0	42	1	74	0	0	3	0
U1244	U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	4	1	12	0	18	1	51	0	0	3	0
U1245	U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION	2	0	16	19	15	1	40	0	0	3	0
U1246	U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	3	1	20	19	21	1	62	0	0	3	0
U1247	U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	2	1	22	13	27	1	47	0	0	2	0
U1248	U1-15 DO YOU PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	2	0	10	13	9	1	31	0	0	2	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPC 226	SPC 251	SPC 700	SPC 701	SPC 702	SPC 703	SPC 704	SPC 705	SPC 706	SPC 707	SPC 708
U1249	U1-16 DO YOU PERFORM TASKS ON INPUT DEVICES	9	0	20	25	18	1	53	0	0	2	0
U1250	U1-17 DO YOU PERFORM TASKS ON STORAGE DEVICES	9	0	20	25	18	1	51	0	0	3	0
U1251	U1-18 DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	3	0	14	19	12	1	29	0	0	3	0
U1252	U1-19 DO YOU PERFORM TASKS ON CONTROL SECTIONS	11	0	18	13	21	1	43	0	0	4	0
U1253	U1-20 DO YOU PERFORM TASKS ON OUTPUT DEVICES	12	0	18	13	21	1	46	0	0	4	0
U1254	U1-21 DO YOU PERFORM TASKS ON POWER SUPPLIES	12	0	18	19	18	1	43	0	0	5	0
U1255	U2-01 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	28	3	10	6	12	35	43	62	10	50	0
U1256	U2-02 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	1	1	6	6	6	4	6	2	3	22	0
U1257	U2-03 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	1	1	6	6	6	4	6	2	2	21	0
U1258	U2-04 DUMMY TASK TO IDENTIFY INCUMBENTS WHO PERFORMED NO TASKS	3	6	0	0	0	2	1	3	6	0	3